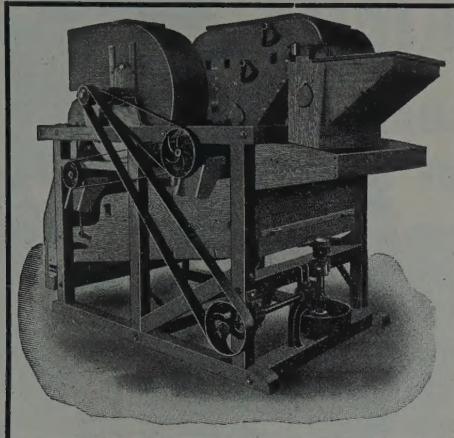


The Ohio Oscillating Corn and Grain Cleaner

A JUDGE
OF
MERIT
WILL SELECT
THE
OHIO
MACHINES
EVERY TIME



THERE IS A REASON FOR IT

When Elevator men write us letters like the following, are you surprised that we doubled our sales during the year of 1909.

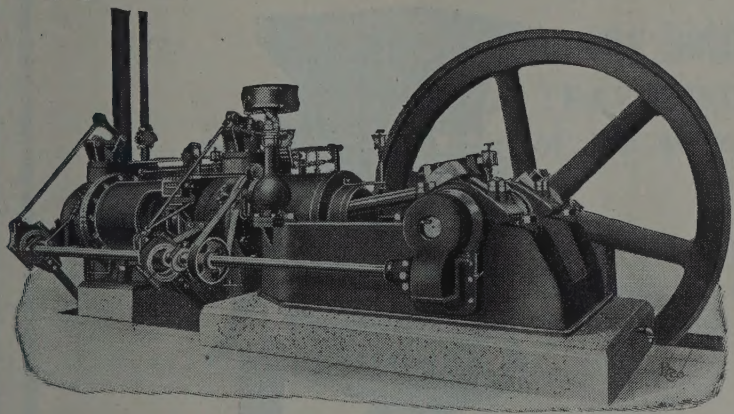
THE BRYANT GRAIN CO.
Bryant, Ind., Feb. 22, 1910.

In regard to the Grain Cleaner, can say that we are very well satisfied with it. We have commission men tell us that we ship the best cleaned corn that comes to **their market**. Will say farther that no one will make a mistake by buying a Grain Cleaner put out by the Philip Smith Mfg. Co.

Yours respectfully,
BRYANT GRAIN CO.

The Philip Smith Mfg. Co.
SIDNEY, OHIO

Why does Gas Power appeal to the Grain Trade?



Because it presents a
FLEXIBLE, ECONOMICAL and ENTIRELY SATISFACTORY POWER

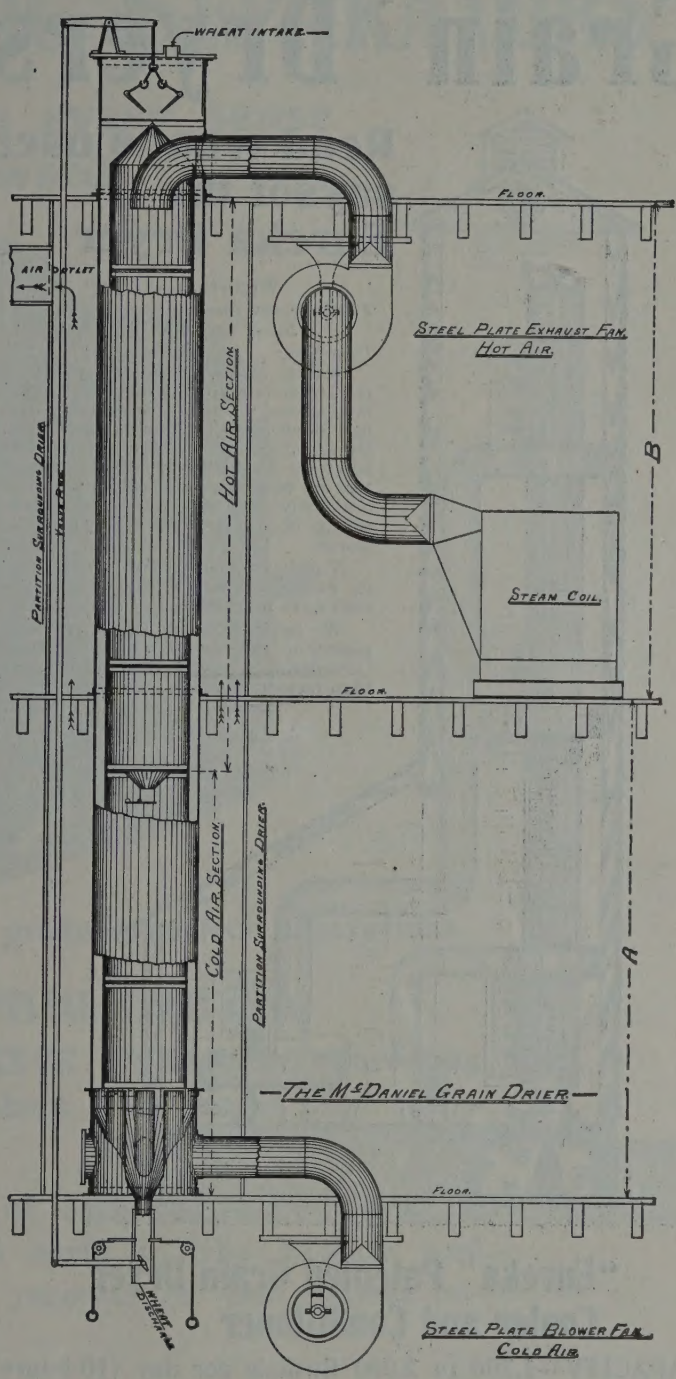
Does a St. Marys furnish your power?
Let us get acquainted, we can furnish you an engine for any service, 2½ to 480 H. P.

We can interest you with any fuel.

ST. MARYS MACHINE CO.
(ESTABLISHED 1869)

ST. MARYS, - - - OHIO

McDANIEL GRAIN DRIER



Will remove any percentage of moisture desired.
Hot or cold air or both can be used.
Built for any capacity.
Guaranteed satisfaction.
Hundreds in daily use.

NIAGARA SEPARATORS AND OAT CLIPPERS ARE UNSURPASSED

RICHMOND MFG. CO. LOCKPORT N. Y.
Established 1863



"EUREKA"



Grain Dryers

Read what a user
says of the
Eureka Dryer

WICHITA, KAN., Sept. 15th.
The S. Howes Company,
Silver Creek, N. Y.

Dear Sirs:

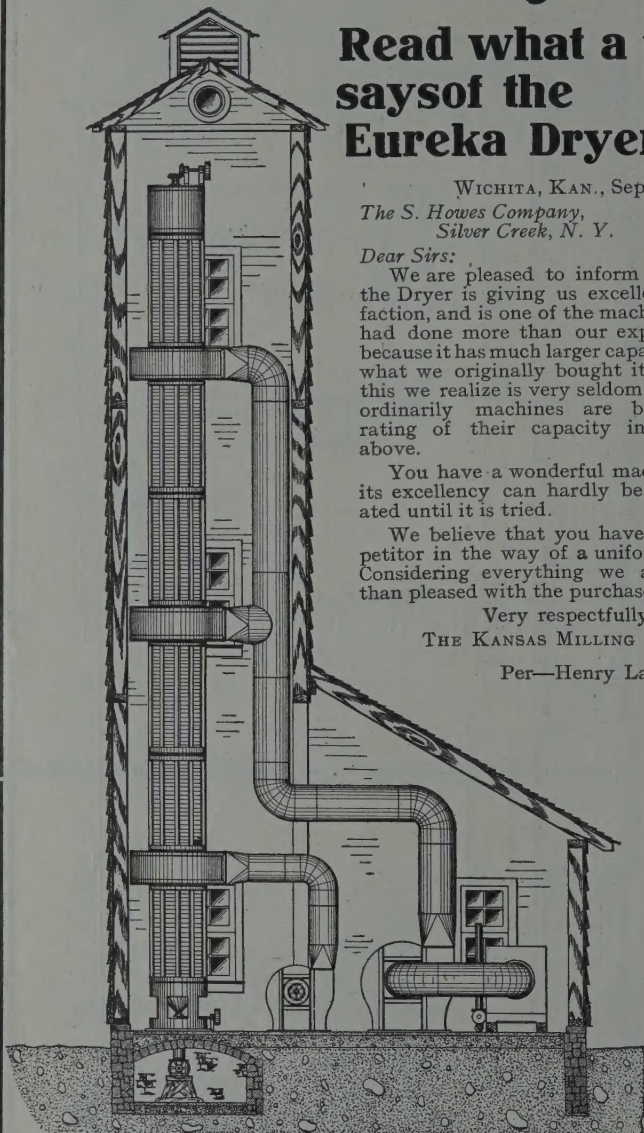
We are pleased to inform you that the Dryer is giving us excellent satisfaction, and is one of the machines that had done more than our expectation, because it has much larger capacity than what we originally bought it for, and this we realize is very seldom the case; ordinarily machines are below the rating of their capacity instead of above.

You have a wonderful machine and its excellency can hardly be appreciated until it is tried.

We believe that you have no competitor in the way of a uniform dryer. Considering everything we are more than pleased with the purchase.

Very respectfully,
THE KANSAS MILLING COMPANY

Per—Henry Lassen,
Pres't.



**"Eureka" Patented Grain Dryer
Cooler and Conditioner**

CAPACITY—1,700 to 2,000 Bushels per day (10 hours)

Complete with Hot and Cold Air Fans, Heater, Steam Trap and Air Piping. Automatic and Continuous in operation as Dryer and Cooler. Total Height, 49 feet.

SOLE MANUFACTURERS

THE S. HOWES COMPANY

Originators of the Highest Grade Grain Cleaning Machinery

"EUREKA WORKS" - SILVER CREEK, N. Y.



REPRESENTATIVES

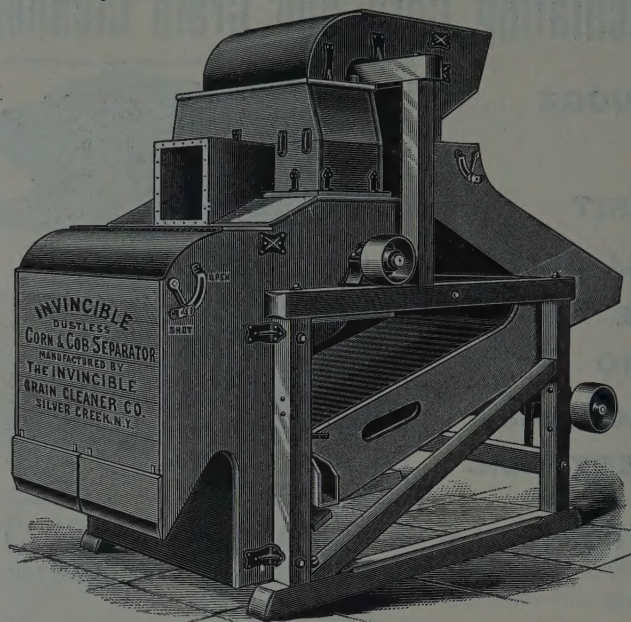
E. A. Pynch & Co., 311 Third Ave. S., Minneapolis, Minn.
J. Q. Smythe, Hotel Savoy, Kansas City, Mo.
Wm. Watson, Kaiserhof Hotel, Chicago, Ill.
W. M. Mentz, Green's Hotel, Philadelphia, Pa.



CLEAN YOUR CORN

This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.

It is the most popular corn and cob separator on the market, the result of its extremely nice work. Order now.

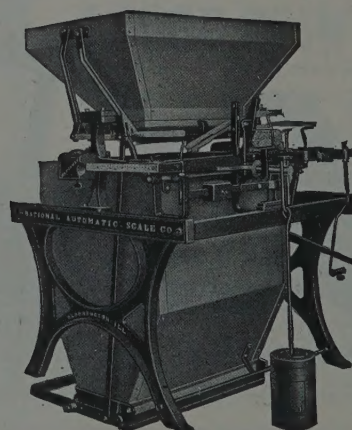


INVINCIBLE GRAIN CLEANER COMPANY
SILVER CREEK, N. Y., U S. A.

—REPRESENTED BY—

J. H. Pank, 512 Traders' Bldg., Chicago, Ill.
F. J. Murphy, 225 Exchange Bldg., Kansas City, Mo.
The Strong-Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
Chas. Beatley, Terminal Hotel, St. Louis, Mo.
J. J. Ross Mill Furnishing Co., Portland, Ore.

The NATIONAL



is the Automatic Scale you have been looking for. A scale that will cause you no worry and one that you can **swear by**. A scale that will **accurately** weigh your grain while you do something else. **TO OPERATE:** Turn on the grain and "let 'er go." It is a scale and should be balanced occasionally. Your grain may not be in No. 1 condition and you may elevate very irregular, but you can't fool the NATIONAL.

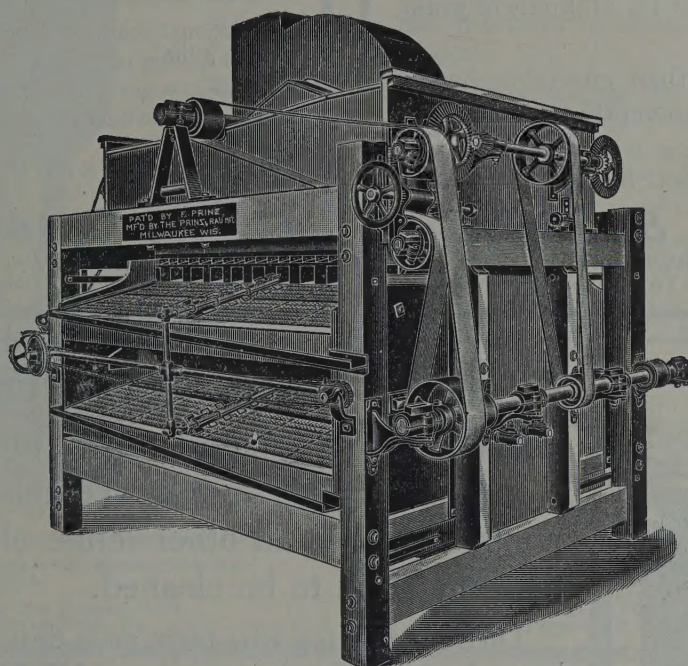
The simplicity of the NATIONAL, together with our long experience in the manufacture of automatic scales, enables us to offer this high-class machine at a surprisingly low figure. It is sold on approval.

—ADDRESS—

**THE NATIONAL
AUTOMATIC SCALE COMPANY**
215 E. Douglas St., BLOOMINGTON, ILL.

PRINZ AUTOMATIC SEPARATORS

are Automatic in every sense
of the word



They require no attention to produce perfect separations.

HERE ARE SOME SPECIAL FEATURES:

PATENTED TRAVELING SIEVE CLEANERS, operating on top of the sieves, where they can be most easily controlled.

SEED SIEVES at the head of each and every sieve, removing the small seeds early in the process, and thereby facilitating the removal of the coarser impurities.

EXCEPTIONALLY LARGE FAN, running at low speed, producing a strong and steady current of air.

Write for Descriptive Circulars

THE PRINZ & RAU MFG. CO.

MILWAUKEE, WIS.

Represented by W. G. Clark, 701 Fisher Bldg., Chicago, Ill.; A. H. Kirk, 1-A Chamber of Commerce, Minneapolis, Minn.; F. E. Lehman, 124 Board of Trade, Kansas City, Mo.; C. H. Near, 757 Ellicott Square, Buffalo, N. Y.; M. D. Beardslee, 106 Piquette Ave., Detroit, Mich.
European Representatives, Ingenieur Bureau, Prins Mauritsplein, La, The Hague, Holland.



Elevator Screw Conveyors Buckets

Salem Buckets fill easily, carry maximum load, and empty clean. Notice rounded corners and general shape. The best elevator bucket for all kinds of grain, and mill products.

Made in more sizes and gauges than any other bucket on the market. We fill orders promptly from the large stock which we carry.

SEND FOR CATALOG No. 34.

H. W. Caldwell & Son Co.

CHICAGO, 17th St. and Western Ave.
NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church St.



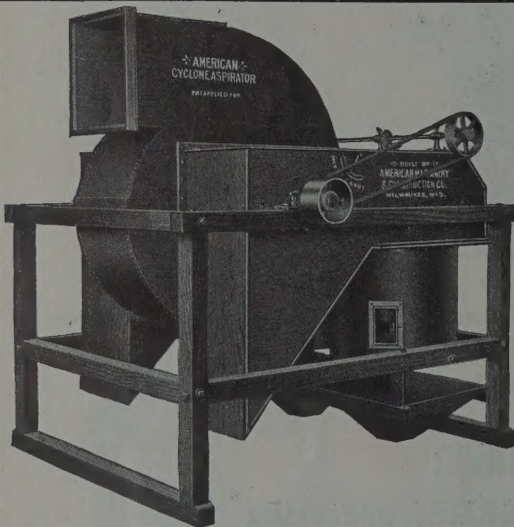
Unquestionably our Helicoid (continuous flight conveyor) is the best screw conveyor made. We are the originators of and fully equipped to make the sectional flight conveyor also, but advise customers to use Helicoid, because it is better balanced and more durable than any other screw conveyor, and renders more satisfactory service.

Helicoid conveyor is well adapted to the handling of grain and all milling products; cotton seed and cotton seed products, fertilizers, sugar, starch, rice, coal, ashes, cement, concrete, phosphate, sawdust and many other articles.

HELICOID COSTS NO MORE THAN OTHER CONVEYORS

H. W. Caldwell & Son Co.

CHICAGO, Western Ave., 17th-18th St.
NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church St.



It Weighs Each and Every Kernel of Grain Individually--separates oats from wheat, barley, rye and corn---extracts all shrunken kernels, chaff, seeds, stems, straw joints, chaff and all other refuse of a lighter specific gravity than the grain to be cleaned.

That is the reason why every grain dealer, miller or maltster who wants his grain absolutely clean needs an **AMERICAN CYCLONE ASPIRATOR**.

We are also the makers of the American Grain Cleaners and Separators.

American Machinery & Construction Co.
MILWAUKEE, WISCONSIN

Will You Need Elevator Machinery or Supplies This Year?

Prices are advancing—order early, or send for estimates. Best goods—best prices.

GRAIN DEALERS' SUPPLY COMPANY
305 South Third Street Minneapolis, Minn.

General Agents for Avery Automatic Scales for Iowa, Minnesota and the Dakotas. They are accurate, durable, simple.

SEEDS THE ALBERT DICKINSON CO.

DEALERS IN
GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS, PEAS, POPCORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.
CHICAGO, Ill. Branch: Minneapolis, Minn.

Elwood's Grain Tables, A book needed by every miller and grain dealer. It shows the value of any number of bushels or pounds of wheat, rye, oats, corn or barley at any given price from 10 cents to \$2.00 per bushel. Cloth bound, 200 pages. Mailed on receipt of price, \$1.25, by

MITCHELL BROS. & CO., 315 Dearborn St.

CHICAGO

NEW MARSEILLES DUSTLESS CYLINDER CORN SHELLERS

WE MAKE Hand and Power Corn Shellers, Horse Powers, Feed Grinders, Portable Elevators and Wagon Dumps, Pump-Jacks, Grain Elevator Machinery and Supplies.

Made in Several Sizes, Both Stationary and Portable Styles.



POSITIVELY GUARANTEED to shell either shucked or unshucked corn faster, with less power in proportion to capacity; take the corn off the cobs cleaner; clean both cobs and corn more perfectly; do less crushing or grinding of corn or cobs and save a larger per cent of the corn than any other cylinder sheller on the market. Send for Catalogue.

SPEAKS FOR ITSELF

Gainesville, Texas, May 12, 1908.
Marseilles Mfg. Co., Marseilles, Ill.—Gentlemen:—We purchased the first Shuck Corn Sheller you ever made, some eighteen or twenty years ago. Since then we have bought 12 or 15 of them, representing every improvement, and expect to buy several more this season. We have bought one or more of about every other make and think we are competent judges of such machinery. Your Shell-ers husk and shell the corn off the cob more thoroughly; save it more completely; clean both the shelled corn and the cobs more perfectly; require less power in proportion to capacity, are more durably constructed and cost less, loss of time and cost of repairs considered, than any sheller we have ever used. We have thrown out every other kind of Corn Sheller we ever bought and have replaced them with yours. KEEL & SON, By J. Z. Keel.

Branch Houses and General Agencies at Principal Distributing Cities.



YOU'LL BE HAPPY

WITH A
"NEW ERA"
Passenger Elevator

It is the **EASIEST RUNNING**
SAFEST
BEST

It has many exclusive features
er Write for
information and prices.

Sidney Elevator Mfg. Co.
SIDNEY, OHIO.

Want ads. in this paper bring results.
Rates on application.

MARSEILLES MANUFACTURING COMPANY, Marseilles Ill

THE MOLINE UPRIGHT OAT CLIPPER

A Great Power Saver

This Machine will save from 40% to 60% of the power required by horizontal machines and the *cost of the fuel thus saved will in a short time equal the purchase price of the machine.*

It is clipping oats in most cases with less than two horse power per 100 bushels. A No. 9 machine is in daily operation clipping 1550 bushels and using only 28 horse power.

Not only this but the work is better done, the ends of the berry being clipped the hardest.

Then again the grain after leaving the sieves may be discharged into the machine to be scoured and clipped, or by turning a valve, it may be discharged into *the by-pass spout where it receives a good air separation without being clipped.* Thus the operator may use the machine simply as a clipper or as a scalper and clipper.

Our latest Circular tells all about it.

We also make Feed Mills of all kinds with ball bearings or standard bearings, a complete line of SEPARATORS, SCOURERS and ASPIRATORS, GRAIN DRYERS of all capacities and CEREAL MILL OUTFITS.

Barnard & Leas Mfg. Co.

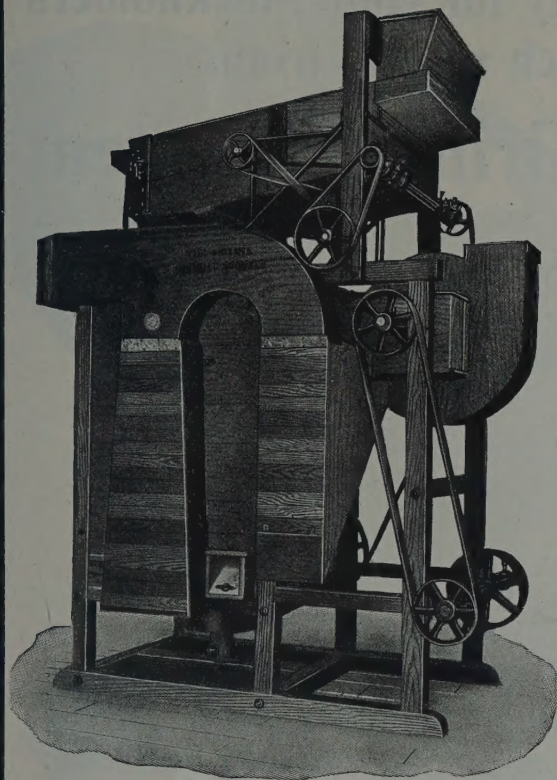
Mill Builders and Mill Furnishers

Moline, Illinois

SPECIAL SALES AGENTS

Southwestern Engineering & Appraisal Co., Springfield, Mo.
Willford Mfg. Co., Minneapolis, Minn.
Barnard Mfg. Co., Spokane, Wash.
M. M. Snider, 1535 E. Walnut St., Des Moines, Iowa.
W. S. Brashear, 421 E. Pine St., Springfield, Mo.

Wm. Ebert, 2028 Midland Avenue, Louisville, Ky.
C. B. Donaldson, 568 Oak Street, Columbus, Ohio.
H. J. Creager, P. O. Box 1595, Salt Lake, Utah.
Geo. J. Noth, Tel. Harrison 5397, 1330 Monadnock Block, Chicago.
U. C. Darby, Williamsport, Md.



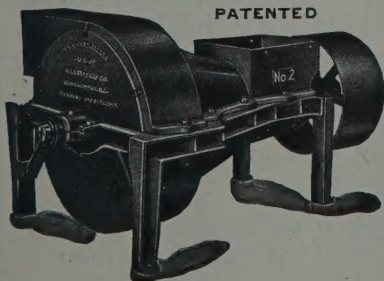
The CONSTANT MAN LIFT

IS ALWAYS READY TO SERVE YOU

It is a pleasure to go to the cupola as the Ball Bearings makes it the easiest operated Manlift on the market. The Safety Catch makes it safe. It is quickly adjusted for different weight men and best of all the Fire Insurance Company write us they will give users a credit on rates. Write stating distance between floors and receive our Net Price.

The U. S. FAN DISCHARGE CORN SHELLER

has exclusive features which makes it the best of its kind.



PATENTED

For instance the

QUICK REPAIR

advantage makes it worth more money to you on a busy day than you realize. Only 30 minutes, or less, to renew a shell or other casting. Lock wheel Adjustment on all our Shellers. Takes up less space, is positive and can be oper-

ated while Sheller is full of corn and running.

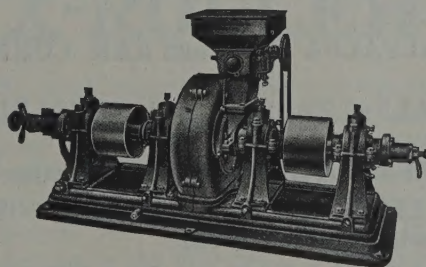
NO MORE SUPERFLUOUS CRACKED CORN.

Send us your specifications for lump price.

B. S. CONSTANT CO., Bloomington, Ill.

Traveling Representative: N. A. GRABILL, Anderson, Ind.

Want to Boost



Your
Grinding
Output?

THEN JUST INVESTIGATE THE

Monarch Attrition Mill

It will grind FAST and HARD, ALL THE TIME.
And it produces a LARGER volume of FINE FEED,
the kind that everyone is demanding these days.

OUR GUARANTEE COVERS EVERYTHING.

Ask for a copy of our Feed and Meal Milling Catalogue No. 26

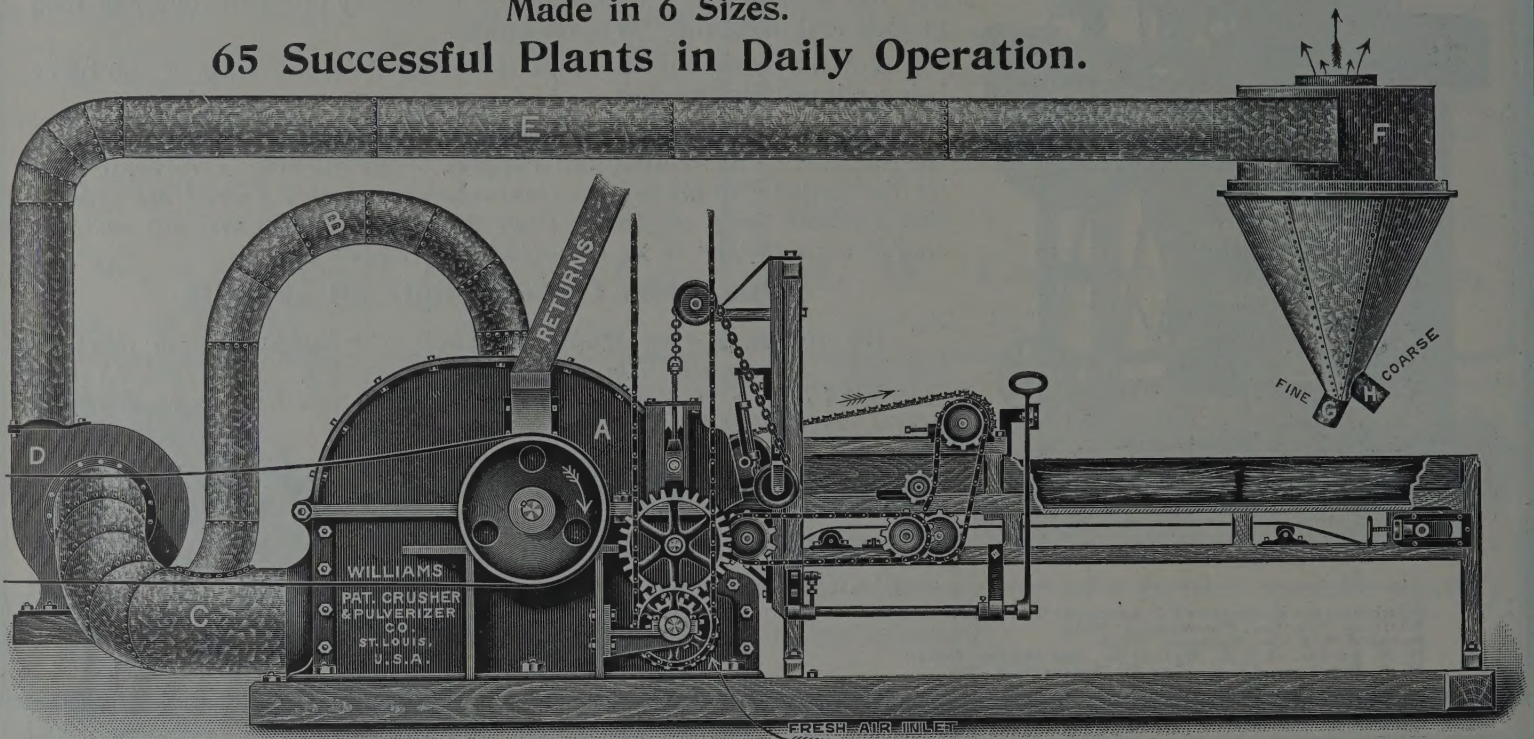
SPROUT, WALDRON & COMPANY
Box 320, Muncy, Pa.

SCRAP that troublesome Alfalfa Grinder and put in the WILLIAMS SYSTEM—Make Some Money for your Stockholders—GET RESULTS. You can only get such results from

The Williams Patent Alfalfa Grinding System

Made in 6 Sizes.

65 Successful Plants in Daily Operation.



THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.
 They will reduce ALFALFA HAY from the BALE or from the STACKS.
 They will reduce ALFALFA HAY and EAR CORN together.
 They will reduce ALFALFA HAY and SHELLLED CORN together.
 They will reduce ALFALFA HAY and OATS together.
 They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.
 They will reduce ALFALFA HAY and PEA VINES.
 They will reduce EAR CORN ALONE or SHELLLED CORN ALONE.
 They will reduce OATS ALONE.
 They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

For Further Information
 Write for BULLETIN No. 7

They will reduce ANY FORAGE material or CEREAL, together or separately.
 They will reduce GREEN CORN from the field.
 They will reduce CLOVER HAY, TIMOTHY or ANY KIND OF STRAW.
 They are CUTTERS when desired, GRINDERS when desired and SHREDDERS when desired.
 They are COB CRUSHERS when desired.
 They will reduce COARSE OR FINE by changing cages.
 They will reduce OAT HULLS, RICE HULLS, FLAX SHIVES or any other FOOD MATERIAL.
 They produce two grades of goods AT THE SAME TIME, coarse or fine, BY OUR COMBINED SYSTEM OF COLLECTING AND SEPARATING.
 They WILL GIVE DOUBLE THE CAPACITY FOR THE POWER EXPENDED AND COST FOR REPAIRS OF ANY KNOWN GRINDER ON EARTH.

Write for Catalog of the Noxon
 Automatic Hay, Meal and All Around Feeder

Southwestern Representative: A. G. Olds, Care Manhattan Hotel, Wichita, Kan.
 Pacific Coast Representative: O. J. Williams, 428 Monadnock Bldg., San Francisco, Cal.
 Texas Representative: D. J. Hayes Co., 615 Washington Ave., Houston, Texas.

THE WILLIAMS PATENT CRUSHER & PULVERIZER COMPANY
 ST. LOUIS, MO., U. S. A.



No. 116 Clipper Cleaner

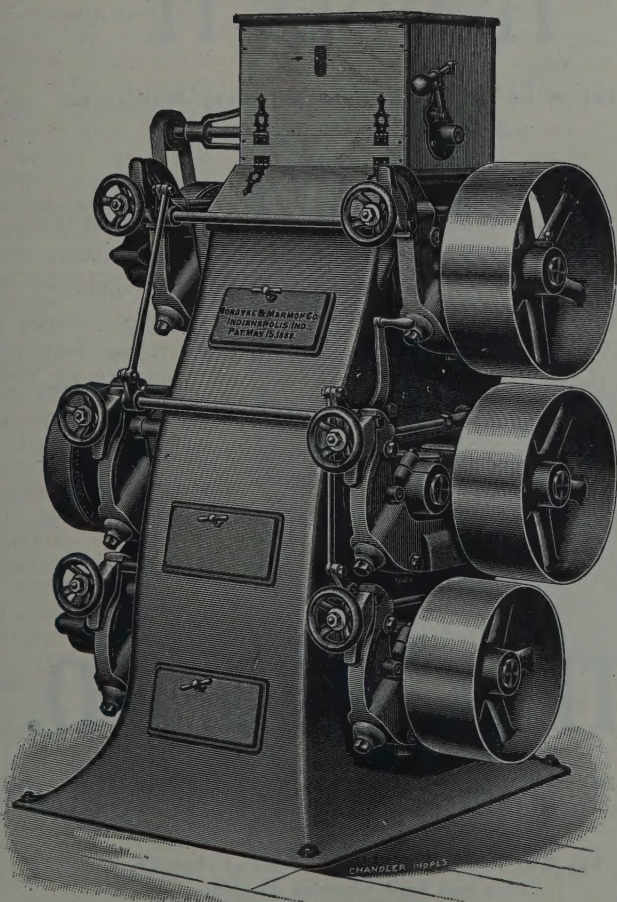
This machine has Traveling Brushes on the screens, special Air Controller, Settling Chamber and Dust Sack for taking care of the dust and light screenings; two stands of Pony elevators, sink hopper and bagger. The cleaner and elevators are driven from a counter shaft on the lower frame of the cleaner. All belting and pulleys furnished complete as shown in cut.

The seed is dumped into the sink hopper connected to elevator boot and carried up to the feed hopper of the cleaner. The cleaned seed discharges from side of cleaner into the opposite elevator boot and is elevated and sacked. This is all done on one floor.

This is a complete cleaning and elevating outfit, and is giving universal satisfaction. This machine has no equal for clover, timothy and all fine seeds.

Write for circular, giving cuts and full Description.

A. T. FERRELL & CO.
SAGINAW - MICHIGAN



The N. & M. Co.

THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

ELEVATOR SUPPLIES

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

Nordyke & Marmon Company

America's Leading Flour Mill Builders

Established 1851

INDIANAPOLIS, IND.

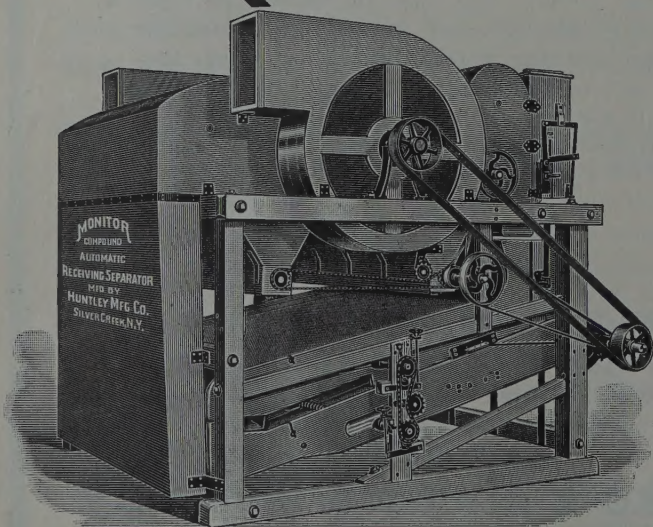
A NEW MONITOR

**A 1910 MODEL
AUTOMATIC RECEIVING CLEANER**

Fully protected by important patents

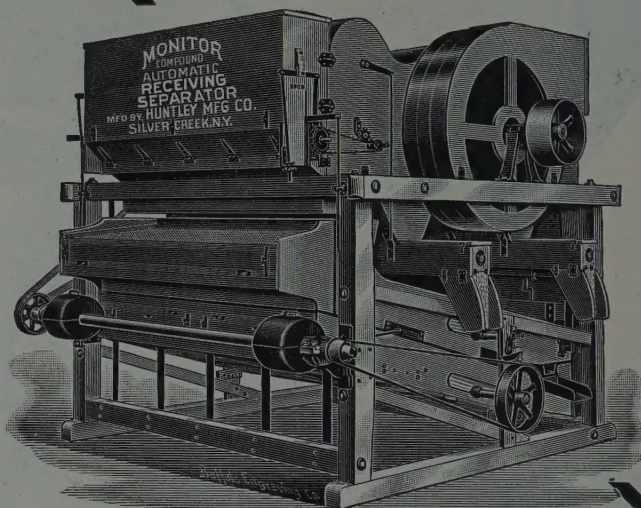
THIS IS WHAT IT WILL DO

Will positively produce a substantial saving on every bushel of grain handled. Close calculation is afforded for both air and screen work. The loss in shrinkage on the air separations of other cleaners avoided, while the screen work of this machine is more thorough and uniform. Cost of operation is reduced—less power, care and attention required. Cost of up-keep practically nothing. Fine, medium or coarse cleaning on all kinds of grain—capacities 100 to 4000 bushels per hour.



IT'S WHAT IT SAVES

on every bushel of grain handled.



THIS IS WHY IT DOES IT

**A list of its exclusive features, every feature an
advantage worth considering**

Automatic disc-oiling eccentrics—fully exposed deep reservoir ring oiling bearings—automatic sieve cleaners—automatic force feeder—internal air equalizing regulators reciprocating compound driven shoes carrying the "three action" type of screen arrangement. All screen frames built in steel pattern forms and of durable construction, these covered with extra heavy metal.

General construction: This is undoubtedly the best appointed and most durable piece of modern high-class grain cleaning machinery manufactured—guaranteed as such.

HUNTLEY MFG. CO.

Silver Creek, N. Y.

The World's Largest Manufacturers of High Class
Grain and Seed Cleaning Machinery.

**CONTINUOUS
AUTOMATIC
SERVICE** — **The New Way
To Clean Grain**

The American Elevator and Grain Trade

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

VOL. XXVIII.

CHICAGO, ILLINOIS, APRIL 15, 1910.

No. 10.

A MODERN FIREPROOF ELEVATOR.

The Sparks Milling Co., of Alton, Ill., purchased the old Willard Kidder Mill property at Terre Haute, Ind., last September. Five days later they contracted with the Macdonald Engineering Co. of Chicago to erect for them a first-class modern fireproof elevator, which we are pleased to illustrate herewith.

This elevator embodies certain special features which the Macdonald Engineering Co. have developed to a high degree of perfection, and which have given them an individuality and are now strongly identified with this company by reason of its simplicity and efficiency, combined with moderate cost and cheapness of operation. It is claimed that the operator could strike a circle four feet in diameter on the floor by the scale beam and control every movement of operation of the elevator machinery and spouting without stepping outside of the ring.

The elevator has a storage capacity of 150,000 bushels with four bins of 30,000 bushels' capacity each, and the rest of the storage is divided up into seven smaller bins. The machinery equipment is designed to unload cars on an outside track, weigh, store and transfer to the mill or ship direct to cars in bulk. The machinery is housed in an annex, or scale house, extending across the end of the storage bins at the ground level. The scale has 1500 bushels' capacity and is located on the ground floor of the scale house. Cars are unloaded into an outside track hopper from which the grain is elevated by means of a short leg to the scale. After weighing, it is spouted to a loftier leg which delivers it through a system of spouting to the various storage bins and also to the car and mill spouts. All spouts leading from the bottom of the bins converge to a central point under the storage, from which it is led by means of spouting to the loftier elevator boot. The operator is in control of all spouting both to and from the bins by controlling mechanism located on the scale floor.

The elevator legs have a lifting capacity of 8000 bushels per hour. Power is supplied by a 50-horsepower Atlas Engine which is connected to the machinery in the basement of the scale room. The car shovels, car puller and all rope drives are controlled by friction clutches, operated from the scale room floor.

The machinery was supplied by Skillin & Richards Manufacturing Company, Chicago.

Work was begun on the erection of this building on October 1, 1909, and it was ready for machinery by December 5 and in complete operation in the early part of February, 1910.

In order to encourage boys to stay on the farm and raise corn in Texas, the Governor of that state

[For the "American Elevator and Grain Trade."]

RUSSIAN AGRICULTURE.

BY JULIAN KUNE.

As stated in my last article, Russia, for the first time since she became a factor among the wheat raising countries, has outrivaled the United States. The phenomenal increase in her production of wheat must be mainly ascribed to a large increase in acreage. This is especially true of the vast lands bordering the Trans-Siberian Railroad. The black soil zone of Southern Russia also has during recent years largely contributed to this increased production by more intense methods of cultivation. It is true that during the last fifty years—that is, since the emancipation of the serfs—agricultural conditions in Russia have greatly changed for the better; but these changes have been gradual, and not in keeping with the advanced ideas of neighboring nations, not even with those of her once political ward, Roumania, the country she helped to gain independence.

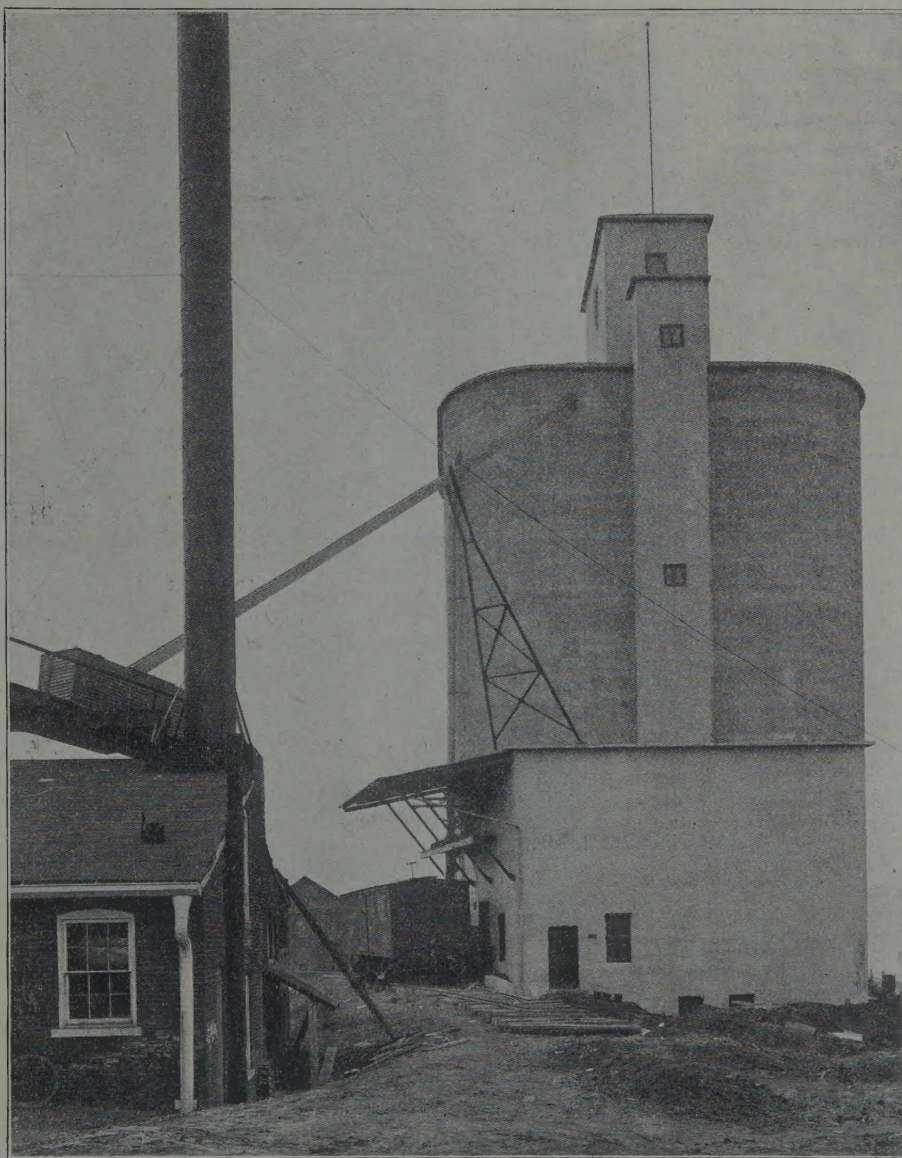
RUSSIAN PEASANTRY.

In order to arrive at a clear understanding of the main cause of the slow progress made by agriculture in Russia, we must first cast a retrospective glance into the origin of the heterogeneous conglomeration of which the agricultural labor in Russia is now composed. As the present article has chiefly to do with agricultural Russia, it will confine itself to an analytical description of the origin and the present condition of the peasantry.

Ages ago there were three distinctive classes among the rural population of Russia. First, at the bottom of the scale were the slaves, to whom great numbers were constantly added from time to time, either by voluntary or compulsory enslavement. To the latter category belonged prisoners of war.

Then the second class was composed of the roving agricultural laborers, who had no permanent domicile, but who went from place to place in search of work. To the third class belonged the commune peasantry, who were members of an association of peasants—the so-called "Mir"—who jointly worked the lands owned by the commune and equally shared the fruits thereof.

The Russian serfs were virtually slaves prior to their emancipation. They were divided in various classes. First came the "Dvorovnya" (domestic slaves). To this class belonged the coachman, foot-



CONCRETE ELEVATOR OF THE SPARKS MILLING CO., AT TERRE HAUTE, IND.
Designed and erected by the Macdonald Engineering Co., Chicago.

has issued a proclamation offering an honorary certificate under the great seal of Texas to boys under 18 years of age, who raise 100 bushels or more of corn on a measured acre of land. Consider this in the light of the fact that the average yield of corn per acre in the United States from 1891 to 1900 was only 25.8 bushels, and in Texas only 18 bushels. While the Governor offers lower grade certificates to boys who raise even 50 bushels per acre, and the winning of one of these will be an honor, the first grade certificate is not beyond the reach of Texas boys.

man, lady's maid, etc. These could not change masters, and they had hardly any legal rights. Next to this class came the actors, musicians and mechanics of the various trades, who were permitted to pursue their avocations but had to report from time to time and to turn in a full report of their earnings, of which they received a certain share.

Advertisements from old Moscow gazettes most graphically give us an idea of the deplorable condition of the class to which the average Russian laborer belonged to. We find advertisements like this:

"To be sold, three coachmen, well trained and handsome, and two girls, one eighteen the other fifteen years of age; both of them good looking; also two hairdressers; can read and write and play on musical instruments; also one can buy a Dutch cow about to calve."

Ultimately all these classes were merged into one—that of the serfs.

THE SERF FARMER.

It was a world-wide known fact that the Russian serf was notoriously lazy, and that while he was working for his master, the Boyar, he exerted himself as little as possible. Since his emancipation he shows more activity and interest in his work, but there is still a great deal to be desired to make him the equal of the peasant of other European countries, such as the Bulgarians, Servians and Roumanians.

Notwithstanding the adoption of labor-saving agricultural implements by some parts of Russia, and more especially by Siberia, the Russian peasant still clings to his primitive implements whenever he can. This tenacity on the part of the liberated serf is indeed worthy of a better cause. It is this leaning to the old ways of farming which forces the large landed proprietor to the use of many primitive implements, which otherwise he would be glad to discard. The Moujik, as a general thing, does better work with the implements his forefathers used than with modern labor-saving machinery. One would hardly believe the difficulties the introducer of modern implements has to encounter in Russia. Several years ago, when the writer introduced the Marsh harvester into Southern Russia, he was the recipient of more cursing than he ever had before or since. He had no difficulty in placing machines for trial, sometimes a dozen on a single large estate, but the crucial point arrived when, after the grain was ripe enough to be cut, he had to find men to bind on the platform of the harvester. Neither love nor money could induce the Moujik to work on the machine. Girls had to be taught to bind; but that not being entirely satisfactory to the purchasers, the sales fell through. The same fate was experienced by subsequent introducers of modernized machinery for many years afterwards, owing to the opposition displayed by the peasants. Were it not for this natural opposition there would have been now tens of thousands of harvesters where there are but a few hundreds. It may take fifty or more years before the self-binder will become as generally in use there as it is in our own country.

Meanwhile the Russian Moujik contents himself with using the "Lobegreka," a reaper roughly made, sometimes even without a reel, which cuts the grass or grain, with a man following with a hand rake to rake it to one side, ready for the binder. It is a very simple and cheap affair and is manufactured all over Russia by the hundreds of thousands. No one maker turns out more than five thousand, and some even as few as three or four hundred—just enough to supply the demand of the surrounding neighborhood.

The idea of this reaper was undoubtedly suggested by the large variety of English, American, German and Hungarian reapers that flooded the country, all of which seem to be too complicated for the dull brain of the Moujik. This machine is just one step in advance of the old way of cutting with the scythe. Of course, it takes much longer to do the work with this machine than with a modern well appointed binder, but what of that? Time does not count for much when the remuneration is measured by kopecks instead of shillings or dollars.

There is still another reason why the owners of

large estates tolerate the Moujik's old and primitive way of doing his field work, and this is: In some parts of Russia, especially in the northern part, where the sugar beet is extensively cultivated, there has been no machine invented as yet that can harvest this crop successfully, hence they require hand labor, which could not be secured if confined to the gathering of this crop alone.

There is one labor-saving machine, however, which has found great favor with the Russian agriculturist, and that is the steam thresher; it is almost universally used in Siberia on the large estates and to a very large extent in southern Russia. Nearly all of them are made in England, Germany or Hungary. They are manipulated by experienced engineers and require but little unskilled labor to help run them.

THE MOUJIK'S DIET.

The Russian peasant considers the production of wheat his most profitable employment, for he sells it

of irregularities charged to the former inspector whose record is now under review in the courts. Mr. White claims to have saved the state \$15,000 during his fiscal year compared with the cost the former year. D. R. Gordon, a grain dealer at Abilene, has been offered and has accepted the appointment to succeed Mr. White.

A NEW ENGLAND HOUSE.

The grain elevator shown in the accompanying picture is a typical New England house of the best type—well built, ironclad and designed for a multiplicity of uses. Its grain storage capacity is 20,000 bushels; and its store houses have room for 400 tons of a variety of products; for its owners, G. N. Bartemus & Co., Concord, N. H., not only handle grain but are commission merchants and wholesale dealers in hay and potatoes (making a specialty of car-lots of both products), and also in but-



G. N. BARTEMUS & CO.'S ELEVATOR AND WAREHOUSES AT CONCORD, N. H.

all and gets the means wherewith to supply his various needs. He very seldom eats bread made of wheat flour. His wheat is all sold, either for export to foreign lands or to the large Russian cities where it is consumed. He regales himself and family only on certain holidays, such as Christmas and Easter, with wheat bread. To him rye, of which he is a large producer (752,000,000 bushels in 1907), furnishes the staff of life. His daily fare consists mostly of cucumbers, raw or pickled, pickled cabbage or mushrooms, with a piece of black rye bread, all of which he washes down, if he happens to have a few kopeks to buy it with, with a draught of vodka, the vilest distilled drink ever concocted. During fast days, which are very numerous, he sometimes partakes of some fish and very rarely does he eat meat of any kind, notwithstanding he may raise cattle, hogs and sheep on his small farm.

John T. White, state grain inspector of Kansas, has resigned, effective April 15. Mr. White is a farmer and took office only to reform the service, which had fallen somewhat into disorder on account

ter, eggs, flour, etc. Such a varied business calls for a composite plant indeed; and here it is. The length of the building on the track is 60 feet and the extreme width 70. The offices is in Moseley's Block, Railroad Square.

It is estimated in the leading distributing markets east of Chicago there are about 6,000,000 bu. of corn in store in all positions. This load in addition to the largest supplies in years in the West is one of the big depressing factors in the corn situation. Local dealers say they have never seen the market so dull as at present, and even the prices for cash corn at tremendous discounts under the futures are not making the grain any more attractive to the buyers. Philadelphia wired that they could not raise a bid from their clients and an Albany message said that for the first time since the firm was organized not a car of grain had been sold for a week. There was a little inquiry for low grade corn for export yesterday, but the bids were for small quantities and were not of much importance. —Tribune, April 2.

[For the "American Elevator and Grain Trade."]
BERT BALL, PUBLICITY MANAGER.

BY L. C. BREED.

Bert Ball, who has been manager of the Publicity Bureau of the St. Louis Merchants' Exchange and was recently appointed publicity agent of the Council of North American Grain Exchanges, is the dean of the Western advertisement writers, having been in charge of the advertising for a number of the largest concerns in St. Louis for twenty years. He was selected by the publicity committee of the Merchants' Exchange last July on account of his varied experience as an editor and special writer.

As the matter of publicity has been more or less neglected by the grain exchanges, when he took charge of this department there were no precedents and consequently he found a virgin field. The first thing undertaken was to get as complete a list as possible from the different members of their correspondents and their business location in various states. These names were classified and the result tacked by the use of pins upon a series of maps, which show the extent of country in which St. Louis grain men operate and where publicity is most needed.

He has succeeded in making arrangements with several hundred newspapers to print the St. Louis grain quotations, and through the St. Louis delegates introduced a resolution at the meeting of the Council of North American Grain Exchanges, at Chicago recently, urging the exchanges to issue daily a comparative market report from each of the primary markets having a grain exchange. This report includes the opening, high, low, close, preceding close and close a year ago, of all the future markets, and also the cash range of the various grades of wheat, corn and oats in each market, with a view of having the newspapers in each exchange's territory print this tabulated daily report, giving all the information desired by grain dealers and speculators, in a compact and comprehensive table. This work has been taken up by the various exchanges and eventually may become the recognized grain market report of the country.

Mr. Ball's long experience as an advertising man is recognized by the members of the St. Louis Merchants' Exchange. He prepares copy and acts as advertising manager for a large number of grain firms, who have turned over this work to him. It is his purpose to encourage the members to advertise as widely as possible in a judicious manner and to furnish information regarding the St. Louis market to the newspapers and trade journals.

He has begun the publication of daily enclosure slips on all subjects pertaining to the grain business, which are furnished to the members to be enclosed in their regular mail, and is preparing a number of booklets upon the subject of "Trading in Grain," which the members will mail to their trade.

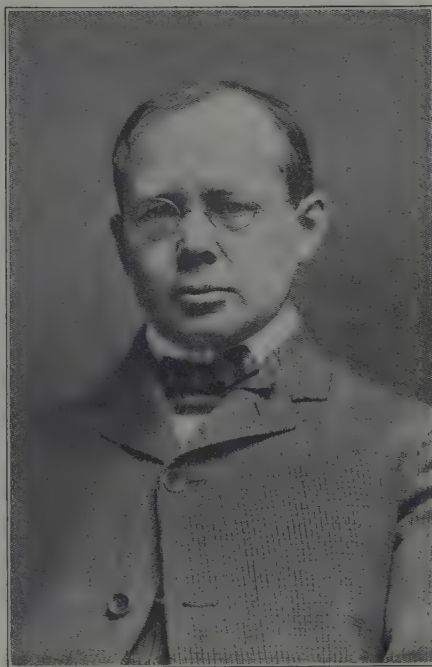
One of his plans is to induce each member to get out advertising matter which has character and force; and he considers that the cumulative effect of all this advertising will have a powerful influence in building up the market. It may be said that future trading in St. Louis has already felt the effect of this current of advertising and that the business is almost double what it was a year ago and is growing perceptibly all the time.

He is also making plans to get a daily market report into the hands of every grain man in the entire territory, whether the section is in line with the St. Louis market at the time or not, and to prevent duplication of this information wherever possible in order that the field may be consequently enlarged.

Members who have headquarters in other markets have offered the use of their wires for market information of importance from the St. Louis market in the interest of the spreaders and the effect has already been noticed by both parties.

A sub-committee has been appointed from the Publicity Bureau to take a number of influential members to the cities of the South and Southeast, and another group West to Kansas and Nebraska, with a view of cementing the relationship, to learn conditions and to invite business into the St. Louis market.

Mr. Ball has obtained volunteers to send telegraphic market reports to important points where the Associated Press does not give proper service and has made arrangements with the post office to make special collections of mail from the exchange to catch the early afternoon trains. He has inaugurated a long distance telephone service to southeastern Missouri, by which the markets are sent four times a day to towns in that section, where the news is given over the telephone to many interested parties in each locality. He has made arrangements with the newspapers at various desirable points to serve small towns and country dealers with information by telephone, and is co-operating with the circulation department of these papers to induce all grain men in their respective vicinities to become regular subscribers to the papers in order to obtain the market information the same evening. He has organized a lodge known as the "Kernels of Golden Grain," which has had its first meeting under the auspices of the St. Louis Grain Club. It is to be a trade organization, with lodges wherever there is a grain exchange, with a view of making a compact union of all interested in the grain trade after the manner of "Hoo-Hoo," an order which has



BERT BALL.

done so much to unify sentiment in the lumber trade. The badge or insignia of the order is the fac simile of a grain of corn in gold, meaning, literally, a "Kernel of Golden Grain." There are a great number of other matters which are now under way in the Publicity Bureau which will, when consummated, add greatly to the business.

Mr. Ball is a great believer in the advertising of the grain business as a whole and believes that when the markets forget their jealousies and work together as component parts of the business they will all get the benefit of each other's activity. He is heartily in accord with the resolution passed by the Council to close the exchanges at 1 o'clock because one of the hardest things to overcome has been to reach the afternoon papers which go to press in the neighborhood of 2 o'clock. Many of these papers at important points have expressed their willingness and desire to print the market quotations, but claim that the press associations do not furnish them in time for publication. He has also offered to disseminate literature for the Council and has already sent the article by Mr. Pfarrius, on "Scientific Farming and Fertilization" to the entire agricultural press of the country. His department is new and has met with many difficulties, mostly those of lethargy and indifference, but it is admitted that the St. Louis Exchange now is one of the liveliest in the United States and is pushing on to still greater activity.

Mr. Ball is a ready and fluent speaker, always seeking to spur the members of the Grain Club at

their stated meetings to give their earnest and cordial support to the plans he evolves to promote progress in his field of endeavor.

[For the "American Elevator and Grain Trade."]
WHEN OATS ARE NOT OATS AND WHEAT IS NOT WHEAT.

BY J. L. ROSENBERGER,
 Member of the Cook County Bar.

In protest 345,381 of A. A. Engle, before the United States Board of General Appraisers it appeared that the vessel in which certain oats were brought to this country from Canada went ashore on Lake Ontario. Considerable water was shipped, which wet the bottom part of the cargo. After the dry oats from the top were taken out those which had been water-soaked were removed and kiln-dried. The testimony showed that the importer made his protest to the classification for duty of these latter as oats, on the ground that they could not be used as horse feed or for human consumption for the reason that they had become sour, though they could be used for hog feed and possibly cattle or sheep would eat them.

The importer claimed that these oats should be assessed for duty as unenumerated articles, following Abstract Decision 19,941, on the ground that it was there held that failure to germinate was one reason for holding a commodity not to be wheat. But the Board knows of no decision of the courts or of the Board holding that any cereal is subject to a different classification simply by reason of its not possessing the quality of germinating or reproducing. This has been urged, and held perhaps in some cases, to be one of the necessary qualities lacking in certain merchandise. In the Devereaux case the commodity was invoiced as "wheat screenings" and described by the collector as "feed wheat." The Board held it to be lacking in those qualities which would distinguish it as "wheat" within the statute, by reason of its not possessing germinating qualities and being unfit for human food; in fact, not such a commodity as was known in commerce as wheat. The United States Circuit Court for the district of Minnesota reversed the decision of the Board upon additional testimony, taken after the Board had made its finding, and held the commodity to be wheat, as the additional testimony clearly showed to the court that it would germinate, and, further, that it was used for food purposes.

In Abstract 19,941, above mentioned, a commodity was under consideration which was entered as "feed screenings," and was classified by the collector as "wheat," against the contention of the importer that it should be assessed as an "unenumerated unmanufactured article." The Board found that the commodity consisted largely of shrunken wheat mixed with considerable portions of other foul substances, conspicuous among which were wild buckwheat, sorrel, chess and other material. The case here was distinguished from that, inasmuch as the commodity there could not be used, and was not used, as wheat; was in no condition to be used as seed wheat, even if it would germinate, and could not, by any stretch of the imagination, have been considered suitable for human food. In fact, a large portion was unfit for either human or animal food. The case did not turn upon the question whether it would germinate, except, perhaps, incidentally, but was decided upon the theory that the stuff could not be classified as wheat under the statute.

The oats in question here, it was true, might not be considered first quality, nor even second quality. The testimony was not conclusive that they would not germinate. Be that as it might, the oats were treated as such and, so far as the evidence showed, were used for animal food. The testimony showed that horses would not eat them. This statement, however, must be taken with some degree of allowance, as the question whether horses as a class would eat certain oats might depend upon many things which were not taken into consideration. The Board has no doubt these could have been used as horse feed had the horse been sufficiently in need of feed. Moreover, the Board knows of no rule which would make the question whether horses would eat oats the

all primitive races first employed, namely, the mortar and pestle, as can possibly be described. To reduce any material by the mortar and the pestle the operator delivers a succession of blows with the pestle in the mortar. The Williams flexible hinged-hammer crushing, grinding, granulating and shredding principle is the mortar and pestle operation reduced practically, scientifically and commercially into motion by mechanical power. The Williams system of grinding is a succession of rapid impact blows caused by centrifugal action and superinduced by the flexibility of the beaters, or hammers (as they are termed), which with each revolution strike the material between the points of the revolving body and the cage, or screen, the cage being the stationary grinding surface, while every other process of reduction is a constant rubbing between the grinding parts, which creates friction and uses up power.

The Williams Company have issued a very interesting bulletin, entitled "Stock Food Edition," which they would be pleased to send to all interested parties, and they wish it known that they are particularly strong on complete plants for alfalfa, also on special machinery for reducing ear corn to coarse, medium or fine meal. Interested parties should write to the Williams Patent Crusher and Pulverizer Co., St. Louis, Mo., or to the company's sales department, Old Colony Building, Chicago.

THE GOOD SEED TRAINS.

The "Agricultural Educational Train" in Ohio was this season run by the Lake Shore Road between Cleveland and Bryan. The attendance at the towns was good, but better at the western than at the eastern end of the route.

The "Better Farming Special" of the Boston & Albany R. R. was run on March 30 to April 2 and covered many parts of Massachusetts, eighteen towns being visited. The lectures, by members of the Massachusetts College of Agriculture and the State Board of Agriculture and the State Forester, were on general farming, horticulture and dairying, with an exhibition by the Forester specially devoted to predatory work suppression.

The Lehigh Valley R. R. Co. has established an agricultural department with F. R. Stevens, of Geneva, N. Y., as its chief. Mr. Stevens has been doing field work for the New York department of agriculture. This work will consist, mainly, of addressing public meetings for farmers whose farms are tributary to the road. Agricultural subjects of particular interest to the locality will be discussed.

The O. R. & N. Co.'s demonstration train was in charge of the Oregon Agricultural College experts. It spent ten days in eastern Oregon, during the latter part of March. One specialty this year was the advantages of devoting more attention to the growing of field peas for hay and the pease where wheat has drawn the strength from the soil until it is no longer profitable in that line. Field peas introduced in eastern Washington under similar conditions a year ago brought results beyond the most sanguine anticipation, it was said, and it is believed that fully as good results may be obtained in the eastern Oregon dry farming wheat belts.

The "Holden Seed Corn Train" this season went over the Burlington Lines in Iowa, covering about 300 miles of that road. Lectures were delivered to between 6,000 and 7,000 farmers. At Knoxville, where the route ended, it was said that the experience of the week was that not more than one-half the seed corn intended for planting in Iowa this spring is fit for use or will germinate. In advance of the coming of the train, Prof. Lauderdale of Iowa State College of Agriculture went into each locality where lectures were to be given and secured samples of seed from twenty or more different corn growers, as widely distributed in the various counties as possible. These samples of corn he tested in a germination box, where they remained until one week prior to the arrival of the Holden Special and were then used in the lectures and demonstrations.

H. H. McLean, president of the Farmers' Union at Walla Walla, Wash., recommends treating all wheat to kill smut; but he has discovered that the

treatment will prevent germination if planting is long postponed thereafter. He treated grain last fall and planted it in a box this spring. Of 50 grains treated only three germinated, and of 52 grains treated with vitriol showed but 16 to germinate. The conclusion is that grain treated in the fall must be planted at once and under no circumstances held over for spring planting.

HENRY C. SCHULTZ.

Henry C. Schultz, of the Schultz & Niemeier Commission Company, was born in St. Louis on December 6, 1861, and received his education in the schools of that city. After leaving school thirty-two years ago, he entered in the grain commission business, being employed for a period of twenty consecutive years with one company in the capacity of office boy, clerk and salesman, gradually advancing through the years to salesman on the Exchange floor and to a membership in the firm. Some thirteen years ago he formed a partnership with C. L. Niemeier in the commission business; and since its incorporation, under the name of Schultz & Niemeier



HENRY C. SCHULTZ.

Commission Company, ten years ago, Mr. Schultz has been its president.

Henry C. Schultz has been a member of the St. Louis Merchants' Exchange since January 3, 1882, is known to be a conservative and energetic business man and has been honored by his fellow members by important trusts in connection with the management of the Exchange.

MISSOURI TRANSACTIONS TAX.

The Missouri Supreme Court has upheld the validity of the law recently enacted in that state, requiring a 25-cent tax stamp to be placed on all contracts for purchase and sale of grain, stocks and provisions for future delivery.

The case originated in Kansas City but was conducted by the grain exchanges of that city and St. Louis, the secretaries of which have been custodians of the amount of the tax accumulated since the law became operative. Both now hold quite large sums. The tax is expected to yield the state about \$50,000 annually.

The case having been decided by a portion of the court only, a motion has been made to refer the cause to the full bench, but the motion will likely be overruled, if it has not already reached that stage. Kansas City, Kan. also generously invited the Board of Trade of Kansas City, Mo., to move to the other sunny side of the Kaw; but the invitation has been declined.

Correspondence solicited on grain trade matters.

WHY THE HEAVY DISCOUNTS.

The fault found with the Chicago market in February and early in March by Illinois country shippers was that the discounts for off-grades delivered on to arrive contracts were unreasonable. At the joint meeting of the select committee of the Illinois Association with the Grain Committee of the Chicago Board of Trade, Sec'y Strong during the course of the discussion said: "Our dealers cannot understand, in the country, where the great difference comes in on the discount. Now, that is our contention,—if corn that has 19 per cent of moisture is worth one price, and 19.1 per cent moisture will dock it two cents, and 19.2 will dock it four cents, the country dealers do not know where they are at. Up to this time the shippers have absorbed this discount with a great deal of grumbling, but they are not going to do it in the future. It must go back to the producer, and it is going to be a hard stunt to satisfy the farmer about this corn that you could not tell [from No. 3] to save your life, unless you put it under the moisture test, and if you put it under two tests you would not know then that there is a difference of two to four cents a bushel. That is the proposition that we are trying to determine."

This is indeed a most important matter; but like every other proposition of any moment whatever, it has of course two sides. What is the other? Did receivers arbitrarily fix discounts? Was there no competition for the grain that would affect the discounts? Or, was there a substantial business reason for them?

During the course of the same meeting, then, to answer the questions propounded by the statements made by commission men and buyers of grain for consumption, we find the following explanations given for the condition of the market complained of.

Geo. A. Wegener, vice-president Geo. H. Sidwell Co., commission, said:

We have had days when we could sell this corn on samples submitted, without any submission to moisture tests; and when we can do that, we are glad to do it. Other days we get our corn and find no demand except that based on moisture tests; and when we do so, I think we wire the fact to the country that it is subject to the test. It has been a hard winter. In December we delivered the corn without much difficulty when it was No. 4. The discounts were not wide; but as the buyers had their elevators full and found no outlet for the corn, they backed away from the No. 4 and widened the discounts; and if there was any profit in it, I am sure some of the buyers might come forward with a little better bid than we have been obliged to accept. The same thing is true in other markets.

J. C. Murray, representative on the Board of the Quaker Oats Co., one of the largest buyers of corn and oats (as well as other grains) for manufacture for consumption, said:

I do not think I can lay too much stress on the fact that Chicago is absolutely an open market—that there can be no ring in the market, for more than one reason. . . . If our corn is below the general market, somebody is going to come in here and buy it; and our elevator men are not so situated that they will take a discount of four cents on No. 3 yellow corn if the shipper can get any more for that corn in any market. There is not any question, our market would not last 24 hours.

There is absolutely no use in our grinding down any of our acquaintances; and it is not a fact that Chicago is taking undue advantage of the situation, because we cannot do it. It is absurd to think that we can stand here and make a price on any corn coming up from Illinois that is less than that corn is actually worth. We might do it for a day, or possibly a week, but to continue it for any length of time is absolutely out of the question. Not only have we a number of buyers here who are absolutely free lances, that are continually looking for a chance to turn a trade and make a dollar, but the elevator people are all more or less competitive.

There are different kinds of elevator people. There are those who are just in the business of buying corn here and turning it over, selling it to somebody down here at a profit; and those people are competing here with the regular elevator people. The regular elevator people are mostly in the shipping business. We might just as well acknowledge that the reason corn is selling at 57 cents is because it is not worth more. If we do not pay more for it, that is your lookout. That is where the whole trouble comes in—it is not in the discount; it is in the fact that you have made contracts for stuff that is better than you have got to deliver; and the fact that No. 3 corn is selling at 62½ cents as compared with No. 4 at 58½ or 59, is because there is a scarcity of No. 3 corn and a surplus of No. 4 and the off grades, and the corn is not worth more than is being paid for it.

There was a belief on the part of some that the Board officials could regulate or fix the discounts on

off-grades, but that was declared impossible, as the Board can in no way regulate or fix prices to be paid for grain.

Mr. Murray in another place, continuing our quotations on the former line of explanation, said:

I am simply speaking from my experience as a buyer. I do not sell much stuff on the Chicago Board of Trade, but I do find a great deal of competition in buying, and I have always found competitors when I was a buyer. When I was attempting to buy grain for less than it was worth, there was generally somebody around to take it away from me. I think that idea generally prevails. I think I said in the first place that possibly some irregular combination might go for a day or a week, but competitive conditions in Chicago market have been and are such that no unfair method can be continued for any length of time. This corn,—I do not want to get away from this particular fact, I am talking about this corn,—if it had a value in any market in Europe or anywhere else greater than at Chicago, you know we in Chicago could not set the final price on any sale. I cannot for a moment concede that there is any possible chance for unfair conditions existing for any length of time for a market that is as easily reached by any bidder as is Chicago.

Mr. Wegener: I want to second what Mr. Murray says. I, as a seller, feel the weight of this lack of demand. I never have done much shipping, but I occasionally receive commission orders to buy corn, and I have pointed out to my friends the low price of this No. 4 corn and asked for orders, and their reply has been that they have all the corn they want—getting it cheaper from near-by points. Our chairman [Mr. J. C. F. Merrill], I believe, would like to do some shipping business in corn, and he will tell you whether there is any possibility of getting in. There is the thing that we have got to fall back on—the buyers we think should take this No. 4 corn at a smaller discount, but their elevators are all full, as far as I can learn. I just want to make that situation clear in justice to Chicago. It is an open market; any one can send orders in here to buy this corn. It is an unfortunate situation.

Mr. Merrill: Gentlemen, I do not know that anything I can say will shed any further light on the subject or be of especial interest to you. It is a broad question, and must be looked at broadly. Self-interest very often prevents a fair vision or a broad outlook.

The conditions existing here now [March 2] are due to some very marked changes which have been overtaking us rather rapidly during the past few years. You all know that approximately around five years ago we raised only 1,500,000,000 bushels of corn, and that that was so abundantly sufficient to supply all demands there were surpluses—three crops, two old crops and the new crop,—on hand at that time, and that served as a matter of over-supply to reduce the price in this market for May corn. Consumption has rapidly overtaken production; and not only have we had no surplusage on hand, but the additional 1,200,000,000, or 1,300,000,000, which we now produce has been absorbed. When we had the old corn, the marketing of new corn did not begin so early, and when the new corn did come to market it found a better demand, because there was old corn mixed with it,—what old corn they had. The proposition confronting the elevator man was not then nearly so serious as it is now; and the present condition is one of over-supply in the market of a perishable article. That fact should be well considered.

You may look at the records and you will readily see that it has been many years since there has been any such accumulation, or piling up, of corn in our public elevators as there is now; and it is all kind-dried corn that is presenting a great problem as to its keeping qualities. The men who have it are nervous about it; and the more thinking trade—that is, those who think about that—are nervous about it and do not know just where we are going to land at the end of the germinating season. They have offerings every day of more than they can take care of; and consequently they are more or less indifferent about purchasing, because they can easily supply themselves,—all of which tends to lower prices for the better grade.

Natural conditions this year have made the No. 4 grade the commercial grade; and when a grade falls from the third grade into the fourth, just as when a car falls from the second grade into the third, there is a wide difference in its value immediately, because of the scarcity of the one and a great over-abundance for the needs of the trade of the other. Had we had the shipping demands that we have usually had, our corn would not have piled up in the elevators and we would not have had this condition that we have now, because the demand for the corn would have adjusted this,—the supply to the demand and the price accordingly. But, as has been spoken to you, or explained to you, the elevators are nearly full, and, as I have just said, the men are getting nervous about it. They do not know just what to do with this wet corn, and I actually do not know what is before us in the next four or six weeks, because when we had these conditions a good many years ago, they were conditions which caused the failure of so many strong firms throughout the country. Berrier & Co. went down under those conditions; G. P. Comstock here went down under them—nothing but the superfluous over-supply of a wet crop that they undertook to handle; and I know Greer at one time had 300,000 cars of hot corn, and it ruined him. It was so reported in "Bradstreet," I recall perfectly, because I had occasion to get a report and he failed under that condition.

It is a serious point. We appreciate fully this complaint; but it must not relate too closely to the maximum moisture content of 19 per cent; that grade, you see, has a range of 3 per cent, and now you are talking about the very maximum. The buy-

ers do not get any that average 17½, half way between 16 and 19; they take it all, to get any at all, at 19 or very close to it.

It is true, as Mr. Strong says, that there is no such marked difference between 19.1 and 19.2 as is made, but that is because it falls into the other grade of which there is so much. Out of the 670 cars of corn here yesterday, there was one car of No. 2 corn; the large majority of that corn was No. 4 corn and no-grade corn. You can see what the one car of No. 2 corn was worth, and you can see how much less the No. 3 corn is worth, and then you can see, comparatively speaking, how little of No. 3 corn there is, and how much less the No. 4 corn is worth, as a market condition. The Board of Trade could not if it would arbitrarily fix a price between.

While in Washington the other day I heard the cotton men making a representation before the committee on agriculture of the House on the anti-option bill offered by Mr. Scott; and one of the chief reasons, Herbert Knox Smith told me, why the cotton situation is so much worse than the grain situation of the country is, and therefore in his judgment demanding legislation (he told me that he did not think the grain situation did), was because they had 28 grades of cotton; and the transactions, as I understand it and as Mr. Smith told me, are in the grade of "middling," and the difference between the 28 grades, taking middling as a basis, is arbitrarily fixed, choice and cheap, by a committee of the Cotton Exchange; and whereas a man may buy—a spinner who wants milling cotton may buy—a future and take delivery, he gets, if the production has been such that the crop has been damaged, a mixture of different bales, so many as there may happen to be of the various grades; the entire 28 grades may be represented. Of course, we would not be so badly off as that. The spinner may be delivered horse-collar cotton, or Ostermoor mattress cotton, or middlings on his contract, as arbitrarily fixed by a committee; and during the time intervening between the action of the committee, the market, on the supply and demand basis, may have gotten away from them, even as much as one or two cents a pound. I have told you about that only as a side matter.

THE ANTI-FUTURES BILL.

As was expected at Washington the anti-futures bill that was reported to the House by Mr. Scott's committee on April 5 did not mention the grain exchanges as subjects of regulation, control or interference; but the Cotton Exchanges of New York and New Orleans were hit. "We do not aim to prevent honest, legitimate transactions in futures. The cotton market demands that sort of business, but what we propose to prevent is the purchase and sale of options or futures in all cases where delivery is not contemplated. The evil of the situation grows out of the gambling trades. Eliminate them and you have the cure. By making it impossible for the 'suckers' to go to Wall street you will put an end to most of the dealings upon the cotton exchanges."

The bill follows substantially the lines of the old Scott bill, the principal change being in the elimination of application to the grain exchanges. "This change," said Chairman Scott, "was made partly because the committee reached the conclusion that there are fewer abuses on the grain and produce exchanges than on the cotton exchange, but chiefly because practically all the cotton producers and a large proportion of the cotton spinners and merchants have united in demanding the legislation."

The bill makes it unlawful for any person to send a message over telegraph or telephone lines, by wireless or cable, or through the mails, offering to make or enter into a contract for the purchase or sale of cotton for future delivery without intending that such cotton shall be actually delivered or received. The penalty prescribed is a fine of from \$100 to \$1,000 and imprisonment from one to six months. Each message constitutes a separate offense.

The fate of the bill is very uncertain even in the House. The planters, who would be the chief beneficiaries, or sufferers, through the operation of the bill, are by no means certain they want to take the chances of being sufferers rather than beneficiaries, and while the president of the Farmers' Union denounces the cotton exchanges named, various branches of that organization are not so sure; and some of them have sent to their representatives in Congress resolutions in which they urge that "slight fluctuations in the cotton market either way, which to the individual farmer may appear of small consequence, will, and always do, mean thousands, and even millions, of dollars to the Southern States as a whole," so that "it is to the interest of cotton planters to oppose the abolition

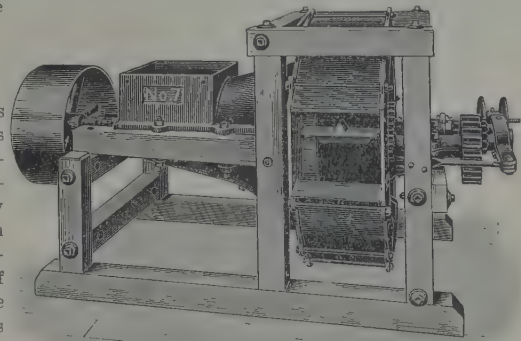
of cotton exchanges, especially those in New York and New Orleans." So that it is rather likely the bill will be suspended in mid-air like Mahomet's coffin, "until after election."

IMPROVED U. S. WAREHOUSE CORN SHELLER.

Our illustration shows the Improved U. S. Corn Sheller manufactured by B. S. Constant Co. of Bloomington, Ill. It is the latest addition to their line of U. S. Corn Shellers, and is recommended by many individual advantageous points.

The sheller is, first of all, strongly made. All castings are heavy and strong enough to stand the strain of the respective capacities, and are mounted on a well braced wood frame. Each casting is independent of the other, and the lower shells are bolted on the under side of the frame so that the shells may be renewed without removing the top shell or cylinder. This is one of the quick repair features of the sheller.

No steel tank, or cemented pit, is necessary, and the corn, cob, silk and shucks are delivered from the sheller to the boot or elevator leg by a set of shallow cups through a connecting spout. The cups are fastened with bolts and jam nuts into a loose sleeve, which is mounted on the main shaft but is independent of the cylinder and runs at reduced speed. The lower shell under the cylinder is slotted, allow-



IMPROVED U. S. WAREHOUSE CORN SHELLER.

ing the corn to escape into the pan below as soon as the corn is shelled. The gears are heavy and made internal and external so that the sheller can be made to fit any location. The lock-wheel adjustment is located on the opposite end of the sheller from the pulley. It is positive, and the operator can adjust the cylinder while the sheller is running and full of corn. The feed-collars in the hopper are of the spiral form and make a positive feed at all times. The manufacturers will furnish full information regarding the installation of the sheller and further particulars on request.

DOCKAGE ILLEGAL.

The Supreme Court of Missouri on March 30, in an opinion by Judge Gantt, sustained the act of 1909 which makes illegal the Kansas City Board of Trade rule permitting elevator operators to deduct 100 per car from the actual weight of grain unloaded into their houses.

The case in which the Supreme Court opinion was rendered was appealed from the Kansas City courts. R. J. House, then president of the Board of Trade, bought a car load of grain on the floor of the Kansas City Board of Trade from James Anderson and deducted 100 pounds for dirt and waste, according to the rule of the Board of Trade. When he was arrested on an information of the prosecuting attorney of Jackson County, he sued out a writ of habeas corpus in the Supreme Court, contending that the statute prohibiting deductions from actual weight was unconstitutional. The case was submitted to the Supreme Court on an agreed statement of facts.

Baltimore has been trading corn for bananas with Jamaica of late, and a regular trade is hoped for on the banana steamers.

rule for their classification, as grades or qualities of oats are not mentioned in the statutes. In the Devereaux case there was nothing, the Board thinks, to lead to the conclusion that the court would have held that wheat which was suitable for food, even though it was of inferior grade, would not be classified as wheat under the statute, simply because it would not grow or had lost its germinating quality.

For these reasons the oats in question are held to have been properly classified as "oats."

BUCKET-SHOPS HIT.

Bucket shops in New Jersey, in the opinion of Judge John J. Blair of Jersey City, are "disorderly houses"—gambling hells, in the parlance. The court was ruling on the case of Edward Altemus and the Standard Stock and Grain Co., which had been raided some time ago. The court said:

After an examination of the authorities and consideration of the testimony in this case the court finds:

First—That the business carried on at 76 Montgomery street, from December, 1908, to January 22, 1910, was illegal.

Second—That the defendants, Edward Altemus and the Standard Stock and Grain Dealers, conducted the business at this place during this period.

Third—That the character of the business and the persistent and habitual manner of its conduct made the place, 76 Montgomery street, a disorderly house, and the defendants, as managing and conducting said business, are guilty of keeping a disorderly house.

John Else and John W. Duggan of the firm of Else & Duggan, stock brokers, Buffalo, N. Y., on March 22 pleaded not guilty to indictments secured by District Attorney Dudley, charging violation of the Hughes anti-bucket shop law. The indictments are the first secured in Erie County under the new law.

Delegate Hammond of Howard County, Md., is preparing a bill for a law to suppress bucket shops in that state. It is modeled upon the law now in force in New York state, which prohibits any individual or firm from making any contract regarding the purchase or sale on credit or margin of any securities or options, when the parties to the contract intend that it shall be settled upon the basis of the public market quotations and do not intend a bona-fide purchase or sale of the securities. Violations of the law are to be made punishable, if a corporation is convicted, by a fine of not more than \$5,000 for each offense, and if an individual is convicted by a fine of not more than \$1,000 or imprisonment for not more than five years, or both. Any person or firm convicted of exhibiting and displaying quotations with intent to lure credulous investors into bucket shop operations is liable to the same penalty. Any domestic corporation convicted of a second offense under this law may be dissolved upon application to the court on an action brought by the Attorney General in the name of the people, and similarly any foreign corporation may be prohibited from doing business in the state. Customers may protect themselves by demanding from their brokers a written statement containing the names of the persons from whom the property they have ordered is bought, and the time when, place where and price set, and a refusal to furnish this statement within forty-eight hours is constituted prima facie evidence of the violation of the law.

W. M. Whitelaw, receiver for the Christy Grain Company of Kansas City, Kans., which failed a year ago, filed his report on March 19 with the clerk of the District Court of Wyandotte County. It shows that the defunct company had no grain on hand at the time of the failure, and that the resources, as well as the liabilities, were in the nature of "wager contracts," which under the law are not collectable. The liabilities are placed at \$143,592 and the resources at \$51,429. The receiver reports cash and collections amounting to \$9,176 and moneys ordered paid out by the court \$5,540. He now has on hand, including \$653 from the sale of part of the office fixtures, a total of \$5,589. He asks the court to allow him \$300 a month salary, dating from March 5, 1909.

The Kansas City, Kan., Board of Trade, a sort of appendage of the Christy Grain & Stock Co., which failed about a year ago, has finally petered out and closed its trading rooms.

Geo. L. Harris, Chas. B. Lightner and Patrick A. Stephens have been indicted at St. Louis for conducting bucket shops, and John F. Ryan for perjury in testimony relating thereto.

Sentences of five members of the defunct "bucket-shop" firm of Odell & Co. of Cincinnati, who were convicted in a lower court on a charge of using the mails to defraud, condemned to six months in jail and fined \$200 and costs each, were affirmed on April 5 by the United States Circuit Court of Appeals. John Gorman, the sixth member of the firm, who was sentenced with the others, received a new trial. The defendants whose verdict was affirmed are: F. W. Foster, J. M. Scott, Edward Heil, Walter Campbell, A. C. Baldwin.

On March 30 the Colonial Grain and Stock Co. of Cleveland was raided by the county prosecutor as a mail order bucket-shop. R. H. and A. L. Parker, the operators, pleaded guilty and were fined \$200 each.

On April 2 the Department of Justice at Washington made a concerted raid on bucket-shops in New York, Philadelphia, Jersey City, Baltimore and St. Louis, and rounded up twenty-six individuals, who are indicted for conspiracy to defraud persons of their money. The men indicted are said to be those financially interested in the following named corporations: E. S. Boggs & Co., which has offices in New York and Philadelphia; Price & Co., which

Minister Laurier also declared the investigation was in hand.

Mr. O'Hara said he was "not at liberty to say, however, as to what has been ascertained as to the truth of the charges. The statement is made that grain is being mixed in certain elevators in a manner entirely contrary to the provisions of the grain act, for evasion of which heavy penalties are provided. Superior and inferior grades have been blended in such a way that wheat when exported to foreign markets is down to the minimum of its class. A serious result of this practice is that the market price of grain is considerably affected."

It is stated that the railway companies are in no way affected; and "it is understood that the inquiry in so far as it has been carried on has been confined to an investigation by officers of the department."

EDWARDS & SONS.

The elevator of W. J. Edwards & Sons at Gomer, Ohio, is so brilliantly white as to remind one of those "dreamlands" of the past, called the "white cities," or of the stuccoed walls of a typical oriental town in its best estate. But this plant resembles these only in its clean and attractive color. It is purely utilitarian and American in all things. The



ELEVATOR OF W. J. EDWARDS & SONS AT GOMER, OHIO.

has offices in Baltimore and New York; Standard Stock and Grain Dealers, which has offices in Jersey City, Philadelphia, Cincinnati and St. Louis. This is the first attack by the Government on this species of gambling robbery; and the theory of the indictments is that every man who was connected in any way with the operation of the three firms which did business in the District had entered into a conspiracy to defraud persons of their money. The Government maintains that every alleged bucketing transaction of the local brokers named was the act of each and every person charged in the indictment. The Philadelphia "Consolidated Stock Exchange," some of whose people were among the arrested, was open as usual on April 4, but the other shops remained closed. The "Consolidated" concern is said to be the clearing house for hundreds of shops and swindlers in all parts of the country, and the amount of its illegal business "amazed even the investigators of the Department of Justice."

MIXING IN CANADA.

C. T. O'Hara, Deputy Minister of the Canadian Department of Trade and Commerce, has given out the information that the Department is investigating the allegations current at Montreal and in the West, that private elevator operators at head-of-the-lakes have been mixing grain contrary to law and that "prosecutions are about to be instituted by the Department against the owners and operators of Western elevators on a charge of making fraudulent returns as to the grading of grain." On March 30 in reply to an interrogatory, Prime

main building is 30x36 ft. on the ground and 62 feet high and has an L 18 feet wide extending along the railway track for 40 feet. The main building's capacity is 20,000 bushels of small grain with a crib on the right of the driveway for ear corn or oats. The office also is on the same side of the driveway.

The plant is entirely new having been completed only about February 10. In fact, the firm began business on February 14. The buildings were erected by L. C. Ewing & Son, and are equipped with necessary handling machinery operated by a gasoline engine.

Gomer is in Allen County, a few miles northwest of Lima, and the elevator in question is located on the Ohio Electric Railroad.

There is not 3 per cent of the grain which comes to Kansas City, Kans., that grades Turkey Hard. Turkey hard wheat was brought to Russell County, Kans., by Russian Mennonites. It has deteriorated very much since sown in sandy soil and is getting lighter.—J. T. White, Chief Inspector, Kansas.

"Present run of damage news was greatest in volume and persistency the old veterans of the trade have ever known," says the Minneapolis Record. "They were probably considerably exaggerated and the worst seems about over. The history of the wheat plant shows that it can stand a lot of punishment and still come up to the scratch. Of course drouth has caused some damage, growing weather is badly needed. It would also make possible intelligent estimates of damage by winter killing and drouth."

CONGRESSIONAL WISDOM.

Congressman Chas. F. Scott of the House committee on agriculture was the "observed of observers" at a luncheon of the New York Republican Club on March 26. He made a speech, of course, in which, amid much applause he read typical letters from business men denouncing manipulation of prices and gambling in futures. He declared that the remedy rested at present with the exchanges; and in this view he had the assent of such speakers as J. C. F. Merrill, vice-president of the Chicago Board of Trade, and Welding Ring, president of the New York Produce Exchange.

Mr. Scott further said that "inasmuch as he had never bought a bale of cotton, a barrel of pork, or a bag of coffee, he felt he had all the qualifications to give advice to a gathering of brokers that an old maid has to advise the mother of ten on the upbringing of her children"; and then with the old maid's penchant for doling out advice he warned his hearers, that while "The New York Stock Exchange and the Chicago Board of Trade are both founded for a high and honorable purpose and speculation in wheat or cotton is as legitimate as speculation in real estate, yet when an exchange becomes a place where men sell what they do not have and buy what they do not want, where a threat to deliver causes nervous prostration, and men trade in millions who could not buy thousands, can you still call this speculation? Well, possibly so, but it is not good business."

Mr. Scott then gave an estimate of the cost of the exchanges to the country. The value of the real estate of the New York exchanges he put at \$14,000,000, the franchises of the members at \$100,000,000, and their annual office expense at \$70,000,000, so that the public had to pay annually \$90,000,000 before either it or the brokers could begin to make a profit. In addition he reckoned that the amount of capital tied up in call loans to carry margin transactions was on the average \$660,000,000, and fluctuated between \$300,000,000 and \$1,000,000,000, so that the annual cost of speculation to the commercial world is about \$180,000,000. "Does the public," he asked, "get as much value from this expenditure as it would if it was laid out in railroads, for instance? Does it add to our food supply? Does it contribute to the prosperity and happiness of the Nation? If these securities were held only for investment, would they not be more widely distributed, and would not prices be more even? For the present," went on Mr. Scott, "my own answer to all this stock watering sanctioned by the stock exchanges is, it is up to you. Set your house in order. This question appeals with tremendous force to the moral sense of the people. A question which thus appeals is settled only in one way. The settlement may be long in coming, but it always does come and always in one way. The good is stricken down with the evil. The ethical evils of the speculative exchange must be eliminated or the speculative exchange will go."

In the other board, W. B. Thompson of New Orleans Stock Exchange, one of the practical business men who replied to Mr. Scott, declared that the growing complexity of the cotton trade made it impossible for "spot trading" to cover the entire field, and he defended trading in futures by those who believed they could sell or buy now at a better price than later as a perfectly legitimate transaction. "The most important feature of the future market," he said, "is probably the hedging facility. It bears the same relation to the cotton trade that insurance does to general business. If it were abolished the cotton trade would be in the same position as business men in general would be if all underwriters were forbidden to issue policies of insurance." He denied that speculation could be eliminated any more than could tidal waves. There are evils, he admitted, which must be eradicated, "and I know of no effectual method except by the action of the people through the strong governmental arm. It is not feasible for Congress to make rules for the government of exchanges, but

it can lay down a few plain principles and charge the executive agency with seeing its mandates are obeyed."

Prof. James B. Clark of Columbia, a member of Gov. Hughes's Stock Exchange Commission, believed the exchanges themselves could eradicate many of the evils, but pointed out that thereby they would reduce the volume of the business which it is at present to their interest to increase. The exact measure of reform to be taken he would be glad to leave to the exchanges themselves to determine.

J. C. F. Merrill, vice-president of the Board of Trade of Chicago, declared that in no place are the teachings of the Sermon on the Mount so thoroughly taken into account as in the exchanges. The root of the evil of speculation, he asserted, is not in the exchanges, and its existence means that the exchanges have failed in their mission. Future contracts do not create prices, but merely register the effects of supply and demand, and it is the small speculators who suffer most from the effects of speculation. It is for the small men that the bucket-shop has been created, and the Chicago Board of Trade, which has spent \$50,000 in fighting them, has still to keep up the fight.

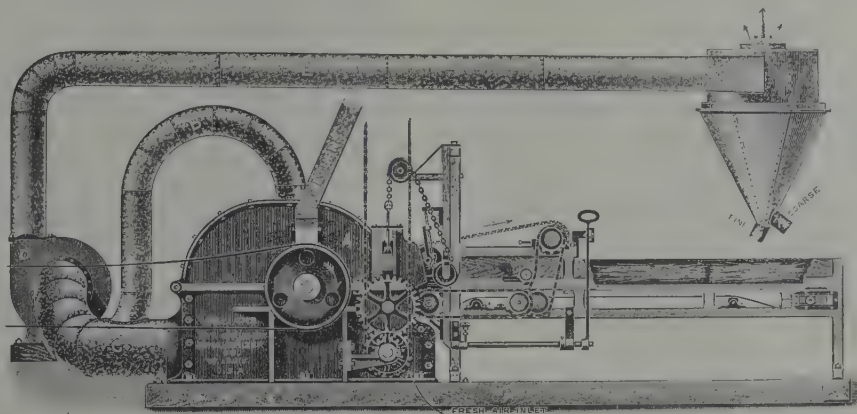
A. P. Marsh, vice-president of the New York Cotton Exchange, scoffed at Congressman Scott's "great moral issue" by remarking that the politicians always make a great moral issue of every-

THE WILLIAMS GRINDERS.

The development of the alfalfa milling business has been a great boon to the "alfalfa country" whose valuable hay has been made all the more valuable by its reduction to a meal, in which form it may be preserved and transported without the loss incidental to its nature as hay only. But alfalfa is not the only forage product that is now being reduced to meal for the same reasons and because the value as feed is heightened when ground above that when fed as hay. The Williams Patent Crusher and Pulverizer Co. of St. Louis are now building complete plants for milling pea vines, pods, fodder, corn, clover hay, timothy hay, Johnson hay, as well as alfalfa and various other cereals that are converted into feed.

The principal of the Williams machine is very well known, or should be by the majority of the Western feed manufacturers, particularly those in the alfalfa belt, since the company has built in the West no less than sixty-five complete plants for milling alfalfa and the various mixtures that are commonly used.

The mixing and grinding being done in the same machine, the system consists of hay carriers to carry the hay to the feeding table, this belt feeding table being a part of the Williams machine, and automatically feeding the hay into the shredder. The hay passes between corrugated rolls and is



THE WILLIAMS GRINDER.

thing to which they object. "After all, the utmost that any speculator can do on a produce exchange is to bring about for a few days or hours in any one market an artificial condition. And he is sure of a much worse punishment than any Congress can enforce—loss of money, prestige, and all that makes life worth living. We cannot now restrain trade in any way. We are no longer free to follow our own impulses, because the legislators, in trying to check one evil, have made it impossible to prevent another."

Speaking for the New York Produce Exchange, of which he is president, Welding Ring declared that if any member tried to form a corner in any commodity the committee of the Exchange would fix a price at which he would be obliged to settle all his transactions.

IMPROVEMENTS AT MONTREAL.

The Harbor Commission of Montreal contemplate extensive improvements of the water-front of that city, which shall include the building of another grain elevator at Section 19, between the Victoria Pier and that occupied by the Manchester Line. The new elevator will have storage capacity of two million bushels of grain, as against the one million capacity of the elevator at King Edward Pier. To make room for the elevator the wooden sheds on Sec. 19, that have done service for so many years, will be abolished, and the Elder-Dempster Line will have to find berthing elsewhere.

The intention to build an elevator as one of the immediate needs of the harbor is a result of the lack of adequate storage for grain experienced last year.

Send us the grain news of your neighborhood.

chopped off, or ground, over a knife and discharged through a perforated metal cage. The material is then taken by air from the machine and deposited in a large Cyclone Collector, where the air is separated from the meal, which falls into bins, from which it passes into the packers and is packed into 100-lb. sacks. With this outfit, loose or baled hay can be thrown upon the feeding table and the material is never touched by hand from the time it reaches the feeding table until it is packed in the sack.

The Williams Company claim that they can give better results with the least possible cost per ton than any other system made. The machine is by no means an experiment, having been manufactured and marketed for the last two or three years; and the system will grind more hay and cereal mix with a given horsepower than any other system, it is claimed, on account of the peculiar construction of the machine. There are no knives or saws to dull, and the capacity is not reduced on account of any of the wearing parts becoming dull. Operators who have been using some of these outfits for two or three years are getting the same capacity and the same good results today that they did when they first installed their plants, and the Williams Company claim that some of the most successful alfalfa milling companies are the ones using their outfits, and they believe that they can substantiate any claim that they make.

This patent hinged-hammer grinding principle introduces practically a new system into the feed trade. The work being done by impact and not by friction, it is as different from all other grinding systems in the world as day is from night. It is as near to the principle which Adam and Eve used in the garden, and which the "noble Red Men" and

[For the "American Elevator and Grain Trade."]

MORE ABOUT SOY BEANS.

BY G. O. DELL.

The Soy Bean in America is a crop for the South,—that part of our country south of Mason & Dixon's Line,—except that in southern Indiana and Illinois the bean has done well. The earlier varieties have matured as far north as Minnesota, Massachusetts and even Ontario; but tests at American experiment stations, and tests have been made at most of them, have made it clear that "the region of maximum importance will be south of the red clover area and in sections where alfalfa cannot be grown successfully."* The soy bean, therefore, will compete in this country principally with cowpeas; but as cultivation is usually required, they fill a somewhat different agricultural need. "As hay the plant cannot successfully compete with red clover or alfalfa. Unless the yield of grain (beans) is fifteen bushels or more per acre, it is hardly profitable enough to grow it for that purpose alone, as it would be too expensive to feed. Some of the earlier varieties will yield sixteen to twenty bushels or more per acre, and when such yields can be secured the crop is a valuable one."

Generally speaking the American soy bean requires the same growing temperature as corn, but does best in a warmer climate. It calls for a good corn soil, but will do fairly well on a poorer soil, provided inoculation is present. It prefers fairly fertile loams or clays and (the Mammoth) the sandy soils; but the richer soils give hay rather than beans as the crop. It requires a well-drained soil and will not grow in a soil where water stands; and yet while paradoxically it will stand more moisture than either corn or cowpeas, it is more drought-resistant than cowpeas.

In Asia more than 200 varieties of soy beans are known, practically every district where they are grown having its own distinct varieties; but in this country only seven varieties are now handled by seedsmen, although many more have been tested, some of which will eventually replace other varieties now on the market. The current American varieties are the Mammoth, Hollybrook, Guelph, Ito Saw, Buckshot, Ogemaw and Wisconsin Black. (See cut.) The Mammoth yields well both of beans and hay; the Hollybrook yields more grain than hay, the latter being too coarse and woody to be desirable; Ito San makes excellent hay, with a moderate yield only, but it matures in 95 to 100 days (25 to 50 days earlier than Mammoth and 14 days earlier than Hollybrook); Guelph has been much advertised but gives a poor hay and a seed pod that shatters very much. Buckshot, Ogemaw and Wisconsin Black are the varieties sold in the North and are really not very desirable compared with the other varieties, except that they are a surer crop in their particular habitats. At least five other new varieties should be on the seeds market in 1910—to-wit, Wilson (black), a heavy grain-yielder and excellent for hay; Meyer (mottled black and brown), 110 days, excellent for hay and large grain yielder, with, however, a tendency to clog when mowed; Austin (greenish yellow), medium-late variety, good grain yielder; Haberlandt (yellow), later variety, recommended where an earlier variety than Mammoth is desired; and Riceland (black), very late, adapted only to the cotton belt, very desirable for hay.

The Bulletin quoted gives instructions for the culture of soy beans not necessary to repeat here, except that good preparation of soil is needed to prevent early growth of weeds; planting (about June 1) in rows by a drill; and carefulness to test the viability of seed, as soy beans, if not properly stored, or if old, are apt to be low in germination; flat cultivation is preferred. Like other legumes, inoculation for nodule bacteria is generally necessary in the South during the first season in isolated localities where the crop has not been grown; and the more northward and westward the crop is tried the more necessary is inoculation.

*Farmers' Bulletin 372: "Soy Beans," by C. V. Piper and H. T. Nielsen, from which the cuts and most of the facts herein are obtained.

HAY.—Soy-bean hay, cut at the proper time and carefully cured is excellent, and for dairy cattle yields results equal to alfalfa hay. The late or medium-late varieties are best adapted for hay, as they grow to a greater height and have finer stems and branches and more leaves than the earlier kinds. The Mammoth and Ito San are preferred for hay of the varieties now sold by American seedsmen, Ito San being earlier by a month, say, than the Mammoth. The soy-bean hay is therefore peculiarly a Southern crop, the plant not being recommended for hay north of the Ohio River, except in southern Illinois.

The hay should be cut when half or more of the pods are fully grown, but before they begin to



A TYPICAL SOY BEAN PLANT.

change color in ripening; or (a better rule) when the top leaves begin to turn yellow. At this stage of growth the largest yield and at the same time a good quality of hay will be secured. If the cutting is done earlier than this, the percentage of protein will be higher and there will be practically no waste in feeding; but the total yield will not be so large and the difficulty of curing much greater. If the cutting is much later than this, the total food constituents will be greater, but there will also be considerable waste of material in feeding due to the stems becoming hard and woody.

The planting should be timed so that the crop can be cut for hay in September, as this month is usually the most satisfactory for hay-making. The cutting may begin as soon as the dew is off the plants and continue for the rest of the day. The plants should be allowed to lie in the swath until the leaves are well wilted, but great care should be exercised to rake them before the leaves become dry and brittle. After raking into windrows they should be left for a day or two, depending on the weather, and then put in small cocks or bunches. Three to five or six days of good weather is ample time for making good soy-bean hay. Great care should be used to prevent the loss of leaves, since these are the most valuable part of the plant except the pods,

When the hay is dry, it should be put in good-sized stacks or under a shed. If it is stacked in the open field it is very essential that some other material, either grass or a canvas cover, be put over the stack, as soy-bean hay does not shed rain well. Yields of from one to three and occasionally four tons of cured hay to the acre are secured. The average yield is about two tons per acre. Curing frames can often be used to good advantage in making soy-bean hay, especially in unfavorable weather. The object of these frames is to keep the cocks open, so as to prevent matting and to allow the circulation of air. They are usually three- or four-sided pyramids made of boards or poles three to six feet long, fastened together at the top and held by crosspieces near the base. By this device a hollow cock or shock is secured and consequent better curing. In stacking the hay, poles or logs placed in the center of stack, so as to leave passages for air, will greatly lessen the danger of spoiling.

Passing over the Bulletin's remarks on soy beans for pasturage and pasturage mixtures of soy beans with cowpeas, "very satisfactory"; with sorgho, objectionable as to yield of soy; with millet, "not good"; with corn, most common; and soy for ensilage (in tentative stage),—we come to the Bulletin's remarks on soy beans for grain, a crop that is profitable with a yield of 16 bushels or more per acre. The feeding value is high, being slightly superior to cotton-seed meal; it is rich in protein while nearly all the other grains produced on the farm are poor in protein but rich in carbohydrates. For grain production tall varieties that do not branch or bear pods close to the ground are desirable, as they are more easily harvested. Of the varieties now on the market the Mammoth and Hollybrook are undoubtedly much the best for the South, while the Ito San and the Guelph, which is also known to the trade as Medium Green, are best for more northerly latitudes. A very serious objection to the Guelph, however, is its tendency to shatter seeds at ripening time. When grown for grain alone, the cutting may be delayed in the case of most of the varieties until all of the leaves have fallen. The Guelph and a few other varieties not on the market retain the leaves late and much seed would be lost by shattering if the harvesting were not done earlier. The plants should be allowed to become thoroughly dry after cutting before they are stacked or put into a barn or shed. Care should be taken, however, not to let them get too dry before they are piled into bunches, as there is likely to be considerable shattering of seed in such cases, especially if rained upon.

The feeding value of soy beans, as has been said, is about equal to alfalfa for dairy cows; and is more valuable than cotton-seed meal as a supplemented feed in the production of pork, mutton, wool and beef. Compared with corn, it is "at least twice as valuable for feed as corn." (It should be fed ground, and is more easily ground with corn which prevents gumming up the mill.) However, "the general opinion in Hamberg is that soya meal, unless fed with the greatest discretion and in very limited quantities, will certainly cause colic," but an importer sets forth its virtues in this language: "For milch cows and common feedings soya cakes are used with undecorticated cotton-seed cake, the cheapest feed stuff on the market, as the combination gives not only a gain in milk but the general health of the animals gains also. The cake contains about 6 per cent of oil and 40 per cent of albumen, whereas the woody fiber is less than 5 per cent. The feed value of the cake comes close to the decorticated cotton-seed meal, and ought to be used in a similar way. The cakes were used by a practical dairyman, who reports that a cow, placed alone for a trial and fed daily with half a cake, mixed with other feed stuff, gave an extra yield of milk every day, and the general state of health of the animal gained considerable by the treatment."*

As remarked in an article on the soy bean in the November number of this paper, the range of usefulness of the soy bean is by no means exhausted

*Quoted in "Soya Bean and Products," Special Consular Reports, Vol. XL, Dept. Com. and Labor, Bur. of Mfrs., Washington, 1909.

when considered as feed only, although its high value in this respect has recently commended it to European buyers, who have been buying the Manchurian beans this season in very large quantities. The oil possibilities of soy beans at this moment are attracting even more attention, in view of which the English "Oil and Colours Trades Journal" says: "There is every prospect of the bean trade in northern Manchuria developing into a complicated and highly speculative business."

In corroboration of which opinion, there is the report of Consul-General Paddock from Harbin to the U. S. Dept. of Commerce and Labor, on the cultivation and use of the soya bean, in which he states that the development of commercial growth

the various commodities which they export to this district, and it is said that one of the principal foreign concerns which proposes to enter the field extensively during the coming season will endeavor to introduce a similar system, as a result of which it is possible that a considerable importation of American cotton piece goods may be made.

I am informed, moreover, that one of the largest foreign exporters has decided to transact its local financial business in this connection through the branch of the Tah Ching (Imperial Chinese) Bank at Chang Chun, in this district.

No large Chinese concern has thus far been interested in the export of these beans from this district, but it is possible that they may enter the field, either independently or in cooperation with some of the foreign concerns interested. It would appear, therefore, that the development of this

CRITICISM OF THE MOISTURE TEST.

Readers of the "American Elevator and Grain Trade," of the March number, will recall Mr. W. L. Shellabarger's criticism of the moisture test as a criterion for grading corn. At the joint meeting at Chicago on March 2, he repeated his objections at greater length, as well as made complaint of the unfairness in general of the 19 per cent maximum of moisture in No. 3 corn. As to what maximum would be right and proper, he said on this occasion:

As to what per cent should be the basis of No. 3 corn, I am not prepared to say, and I do not believe that there is any information, or data, in the hands of any one that would justify them in saying that 19% or 20% is the maximum amount of moisture that corn should contain for No. 3 grade. I put that question to Dr. DeBall of the Government laboratory at Decatur, and he stated that while they had been pursuing the investigations for the past two years, and quite extensively, they had not as yet been able to arrive at any basis that would enable them to put out any information as to what should constitute No. 3 corn, or what kind of corn would carry for a reasonable length of time without deteriorating; that the Government, with the amount of money that it had been spending, and devoting its agents' time and energy in that direction, is not in a position to put out that information. That being the case, I would like to know where they [the makers of the corn rule of the Uniform Grade Rules] got the idea, or how they arrived at the conclusion, that 19% is the maximum per cent of moisture [to be] allowed in No. 3 grade.

If the inspection department is given some leeway, so that 19% is not the maximum amount, I think that the inspection department would be able to grade this corn to the satisfaction of all parties concerned, particularly those who are inclined to be reasonable. Of course, from the country shipper's standpoint, we think there are some things rather unreasonable. And I want to say that in my judgment if the moisture test was simply made by the department with a view of confirming its judgment as to the grade of corn, it would be better than under the existing conditions; and personally I think that the moisture test proposition should be eliminated altogether from the inspection proposition, particularly as the moisture test is so unreasonable and unreliable up to the present time.

AN OPPOSING VIEW.

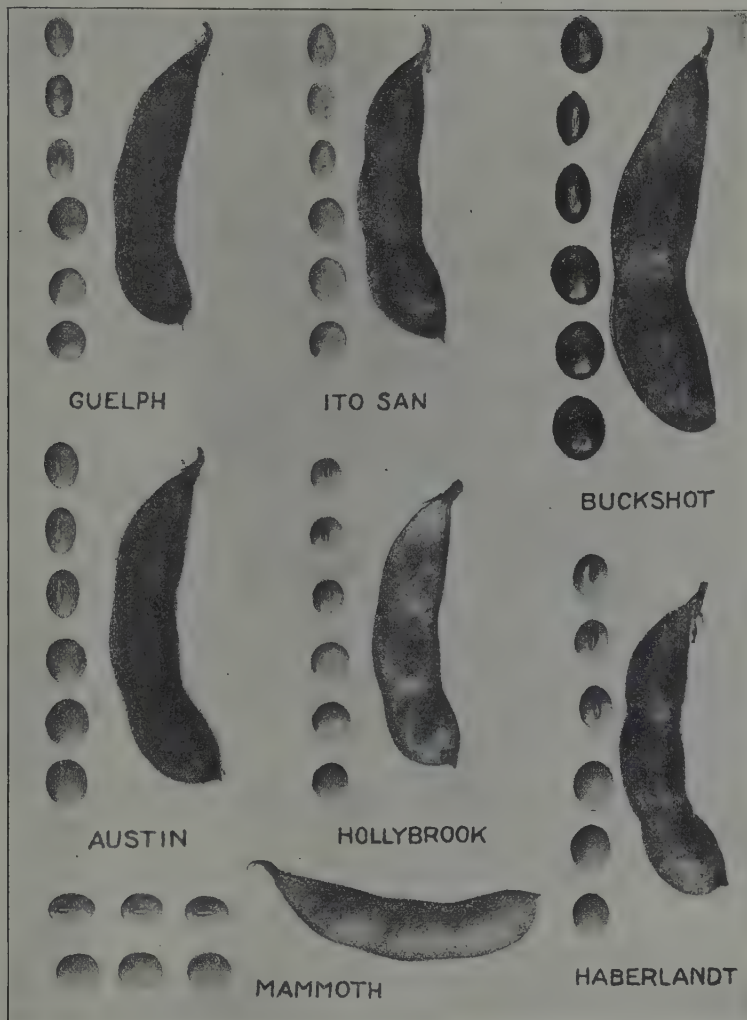
Taking the opposite view, that a definite moisture limit is reasonable and necessary, Mr. J. C. Murray, on the same occasion said:

I believe that the solution, in a large measure, is of the inspection of corn will finally devolve upon the moisture test. As a merchandising proposition: the water element in the corn has not an additional feeding value, and cannot be considered as part of the value of the corn at any time. From the milling standpoint, we simply have to take 20 per cent corn, dry the moisture out of it, just the same as we have to handle 18 per cent corn; and we simply lose the additional moisture, with the added expense of taking out that moisture, whatever that is; and, further, the more water there is in the corn—from the milling standpoint, I am talking—the more moisture that there is in the corn, the greater the deterioration and loss to the miller in handling that corn through the mill after the moisture is taken out. The additional drying, we find, causes a deterioration in the quality of the corn from the milling standpoint. Our loss in feed is greater on corn dried from 20 to 15 than on corn dried from 18 to 15. For that reason we, as millers, believe firmly in the moisture test.

We operated under the moisture test seven mills in Iowa for two years, and at our Akron mill, while we have not operated under the moisture test, we have used the moisture test as a guide to the value of corn and the manner in which we should handle it. We have used it for years; I presume every corn miller has, more or less.

Mr. Shellabarger refers to the arrival at 19 per cent as the maximum as being unfair in a year like this, when the moisture, or water, has not dried out of the corn during its ripening period. That maximum, in ordinary years, may seem to act as an injustice. I do not think that it is, simply because we cannot afford to change our grades and elevate the moisture with each different characterization that comes up with the different crops, and we should stick to a certain basis. If the corn does not grow up to the standard ordinarily accepted as No. 3, then it is not No. 3; and I do not believe our grade should be changed with every fluctuation of crop from year to year. That 19 per cent has been exceeded in the course of this year, is my experience. Our corn at Bradley, this time last year, was running 17 to 18%; this year we are getting little corn running under 20; and I think the crop is averaging considerably higher, judging from what we receive at the Cedar Rapids mills at the present time; and I do not see where any change in inspection is proper that would not take into consideration the fact that the crop is inferior to the standard grade and would have to be graded accordingly.

I think 19 per cent is high enough on corn. I think when we have put 19 per cent of moisture,—19 per cent of water,—allow that much water in corn,—that that is enough to allow in merchantable corn. I do not see any way in which you can get away from the fact that water is water, and that it is not worth anything to anybody. . . . If the moisture tests are unreliable, as indicated by the evidence we have, then we ought to go to every possible length to procure the best possible moisture test to bring about the required improvement. It may not be possible to do that in a day or week or month, but



SEEDS AND PODS OF SEVEN VARIETIES OF SOY BEANS—NATURAL SIZE.

of that district, and may result in an increased importation of American goods in exchange for the beans. The vice-consul writes:

The export of these beans in the raw state to England was initiated in this district by the Mitsui Company, one of the most important Japanese mercantile concerns, which is said to have made over 1,000,000 yen (\$498,000) in this business alone within the past year. More recently, since the beginning of 1909, several British concerns, engaged in business in China, have become interested in the export of these beans to England. While, on account of recently increased prices, excessive freight charges, and other circumstances, it is not believed that extraordinary profits have been made of late, it is understood that the coming season will see an accession to the ranks of local exporters; such important concerns as Jardine, Matheson & Co. (Limited), and Samuel Samuel & Co. (Limited), of London, are reported as interested.

Should the European demand continue, the export of these beans seems likely to become one of the most important features in the commercial development of this district, for the profit to the Chinese farmers and dealers is considerable, and it will arouse foreign interest in the development of northern Manchuria not only through the creation of a new industry, but by supplying the local Chinese population with much increased purchasing power. It is understood that Japanese exporters pay for the beans principally by exchange of

new export industry in Manchuria is worthy of attention.

TAXING GRAIN IN TRANSIT.

Grain in transit is subject to taxation, according to a recent decision of the Supreme Court of Illinois. The case came up from the Municipal Court of Chicago on the following facts:

The grain was in a private elevator at Chicago and was owned by residents of various Southern and Western states. The grain had been sold by these owners to New York, Philadelphia and other cities, the right of removal at Chicago for inspection, weighing, cleaning, etc., being reserved. Bacon, the owner of the elevator, purchased these contracts, and the grain remained in Chicago only long enough for the inspection and treatment. It was admitted that at no time was there an intention of use or sale in Illinois. The court held that the property was not actually in transit when the assessment was made, and therefore was subject to taxation. In other cases it has been held that property is not liable to taxation as it passes over the highway in course of transportation from one state to another, even though there may be delay in such transportation from high water or other cause, but if the property be stored for an indefinite time during such transit, for other than natural causes or lack of facilities for immediate transportation, it may lawfully be assessed by local authorities,

we should all work to that end. I do not believe that the moisture test should be final. I agree with Mr. Shellabarger in that, that there is a lot of corn under 19 per cent that is not No. 3. There are other imperfections, and I think those imperfections should stand against the corn as much as they ever did, with the added restriction that the No. 3 grade should not contain over 19 per cent moisture.

I think another matter in connection with that figure of 19 per cent that has not been touched upon here is that we have a certain fixed percentage on No. 2 corn, which is adhered to rigidly, and we have got to allow a reasonable leeway between No. 2 and No. 3, and when we get No. 3 as far away as 19 per cent, I think we have got it far enough, and I do not believe that 20 per cent corn will ever keep as long as 19 per cent corn, of the same character and appearance. I believe that the added moisture, coming in the germinating season, makes that corn that much more risky. As we all know, even 15 per cent corn is not absolutely safe in the germinating season; 16 is less safe; and the further down you go the worse you get. To my mind 19 is high enough; and we should be willing to accept that as the maximum amount of moisture, and we should work towards improving our moisture tests so that they could be dependable.

Mr. Shellabarger: May I ask you, Mr. Murray, whether you kiln-dry the corn before you dry it in the air?

Mr. Murray: At the Cedar Rapids plant we kiln-dry the corn.

Mr. Shellabarger: Of course, it is a fact that in kiln-drying corn, and then drying it, the waste is greater.

Mr. Murray: The waste is greater; the more water is taken out of the corn, the greater the depreciation of the value of the corn that is left.

VARIATIONS IN THE MOISTURE TESTS.

Subsequently the discussion turned on the variations shown in moisture tests of the same corn (divided samples) by different operators. F. H. Rice, discussing the 19 per cent maximum, said:

They [the Southern and Southwestern representatives at the National convention at St. Louis in 1908] wanted it around 18%. We were very liberal, so much so that we thought we were foolish; and now that we have made it 19, and the corn is such that it carries more moisture,—well, I do not know, I am afraid, gentlemen, if we are going to chasing crops in making our grades here, that we will be in trouble. We ought to have a standard the same as we have in wheat, and if the crop does not come up to that standard, why, grade it as it is. . . . Now, we have gone into this testing proposition with the machine. There is a slight variation, but it seems to me that the variation between the Government test and Mr. Kietel's test is very slight—about 1.2 per cent. Now, what is the difference between Kietel's and the State's?

Mr. Shellabarger: 0.35%.

Mr. Rice: Then Kietel's test comes closer to that of the State than he does to that of the Government?

Mr. Shellabarger: Yes.

Mr. Rice: We find it a little different from that. We find Kietel's and the Government here are working very closely, and that the State is a little more liberal in their inspections; that is, that stuff we would test at 19 has been going over to the Government at 20. But we find a difference in the oils; there is a great deal to be learned yet. We must all have the same quality of oil, all of the thermometers adjusted to the same space from the bottom, and in time we are going to get down to perfection. I believe that these machines are far more reliable than the man, and that we can judge closer by a machine, if it runs perfectly, and we cannot let a man get at it that does not understand No. 2 corn, and say that it has 15, 16, 17 or 18 per cent—he cannot guess as closely as the machine can. I know I cannot. I do not believe that we should change it. I think the time is coming when your differences will become closer—when they will not be as large as they are today.

Mr. Montellus: I would like to ask Mr. Rice a question: Do you think it fair, our moisture tests varying as they do, that we are held up right to the tenth part of a grain on a contract,—do you think that fair when we have this variation? I cannot see any justice in it.

Mr. Rice: In reply to that, I would say, sir, that if we settled upon 20 per cent,—came on 20,—if we flopped over one or two points, to use the same argument, it is simply a case of where are we going to draw the line, and when the line is drawn to stay right there.

Mr. Montellus: We have got nothing accurate,—where do you draw this line? There is a variation in your tests.

Mr. Baldwin: Well, I am glad of that; but the great complaint in the country about this condition is that there is no flexibility to take care of these differences in testing machines. It seems to me that the inspection office should not insist, if it is shown that the corn is No. 3 grade, that it must be thrown out on a technicality. There is no flexibility in that regard. If it can be overcome to a great extent, I do not believe we would hear so much complaint from the country.

Mr. H. I. Baldwin: I think we have got along further than we were, in approaching the standard for grading corn, but I do know that there is a large and loud complaint in the country in regard to matters that we are bringing up here at the present time. One of the troubles is that no two of the moisture tests are alike. The Government officers at Decatur told me that some of these moisture tests in Chicago are not by the machines that are authorized by the Government. I think, in the first place,

that we will have to get closer together, and get some standard for that test.

Mr. J. C. F. Merrill: Right on that point, let me interrupt you, Mr. Baldwin. They must refer to some of the privately owned tests, because those that are made by the Government and by the State are all alike and are those that the Government itself authorizes.

Mr. Shellabarger: There is one statement that is being made and that is about having three bases of analysis here; and, of course, it has been demonstrated, and I will venture the assertion, at the risk of dinner at my expense to the whole crowd, that you cannot take a sample of corn and submit it to all three laboratories here and get the same result. You cannot do it.

Mr. Merrill: You cannot take the same sample but any two that you can get—

Mr. Shellabarger: That is the very point. They draw a sample, and they take 100 grains, 50 grains of this is 1/640,000th of the contents of an 80,000-pound car of corn; and they tell me, Mr. Moore especially has, that they have graded but very little corn that would not exceed 1/169,000th part of the car.

Mr. Merrill: It might be more, you will admit that; it might vary either way.

Mr. Shellabarger: Yes, there you are.

The Chairman (Mr. Merrill): The moisture tests we use are those recommended by the Government; the Government thought so much of it that it bought the patent and killed it in order that the country

house offals, sent as blood, bones, bristles, hides, oils and sausages; cotton and flax; hay, hops and indigo; wines and liquors and vegetable oil (olive); rice, sugar, tobacco, and occasionally beans, onions and potatoes.

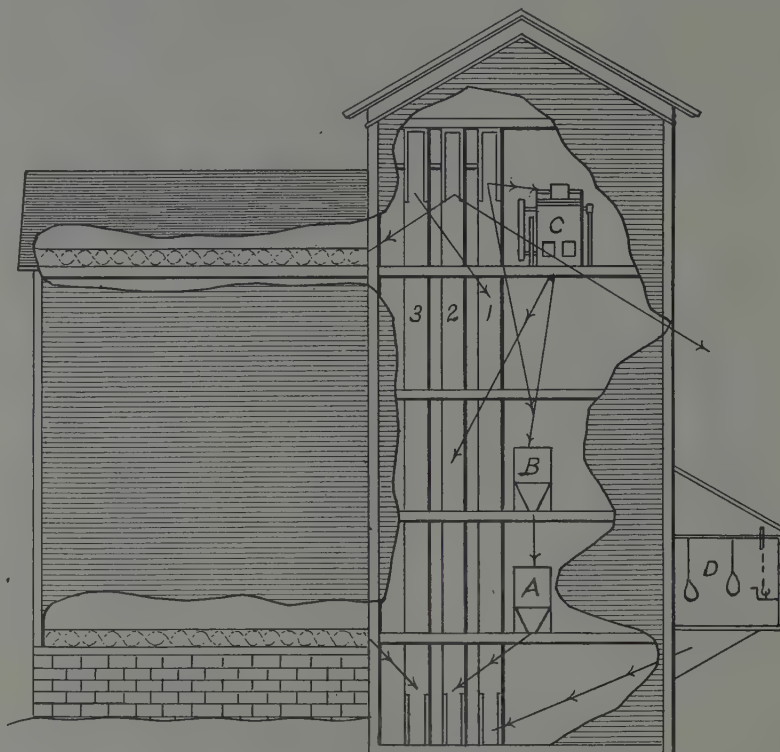
[From the "American Miller."]

HOW TO FIND THE LEAKS WITH AN AUTOMATIC SCALE.

BY HOOSIER MILLER.

Many men who run mills and elevators and buy and sell grain, when they figure up at the end of the year find they have had a bad leak somewhere in the year's business, because the number of bushels of grain handled and their bank account do not balance. And the bank account is always the short side. With an automatic scale installed, as shown in accompanying illustration, I believe the leak may be located.

In this style of installation three stands of elevators are required. No. 1 receives the grain from the farmers' wagons and delivers to receiving sep-



HOW TO FIND LEAKS WITH AUTOMATIC SCALE.

might have it cheap. They use it in their own laboratories, and the tests will not vary more in ours and any state than they will in any other, and it is a Government method, a laboratory method; it is all put by itself and recommended by the Government; it is not anything that we started.

Mr. Strong: No, I understand, we were for it, because we did not know about it. You go and ask the head of the Government inspection department, and he cannot tell you anything authoritative about it.

The Chairman: It is more accurate than out of hand inspection. A few years ago there was an instance of a car analyzed that graded No. 3, with 25 per cent moisture in it. That was very favorable to the country, of course, but it was very unfair to the buyer.

Mr. Strong: We do not want anything arbitrary about it.

IMPORTS FOR 58 YEARS.

The statement that the imports of "farm products" by the U. S. during the 58 years, 1851-1908, increased nearly nine-fold, reaching the great sum of \$540,000,000 in 1908, having grown from \$61,000,000 in 1851, need disturb no one—the imports in few cases are compilation with products grown in this country, although some of the politicians in times past have worried the "poor farmer" by the thought that he has not had ample "protection" with the rest. Sugar, tea and coffee constitute more than one-third of the total. Unmanufactured tobacco, wool and silk constitute another important group; and then there are other tropical products—cocoa, fruits, fibres, etc. Closely competitive imports are butter, eggs, cheese; wool; packing

arator to be cleaned; No. 2 simply delivers grain to elevator bins, or to mill for grinding, or to cars, after it has been cleaned and weighed; No. 3 takes grain from bins. By placing an automatic scale at A on first floor, with surplus bin B on second floor above, the load of wheat may be weighed on wagon scale and dumped at D, passing from elevator No. 1 to separator C and cleaned. Then it passes down through automatic scale A to elevator 2, where it is delivered to bins.

The grain has now been weighed the old way—dirt and all, but the tally on the automatic scale will show just how many pounds of wheat have been delivered to the bin and how many pounds have been cleaned out and lost. In loading a car of grain out from elevator, it may be run through the automatic scale, and there is no mistake in weighing, as the machine does it all.

In buying corn in the ear from the farmer, one buys 1,000 bushels and weighs it up on the wagon scale in the ear, and pays for it. Then he shells it, and when he sells it he finds that he has only 950 bushels to sell, as it did not shell out. By shelling the corn from the wagon and running it through the automatic scale, one knows just how many pounds of corn he has in the bins. So here he finds a leak.

In selecting a scale it should be of about the same capacity as the elevators. If larger it does not weigh the overdraft so well. Also, the scale should have a residue weigher, in order to weigh wagon-loads,

[For the "American Miller."]

SIZE AT THE EXPENSE OF QUALITY.

BY J. R. BOWIE.

The time will come, if it is not already here, when the corn-grower will find his mistake in growing the largest variety of corn rather than a smaller ear of better quality. The large ear does not mature in some of the corn growing states in time to be housed before winter sets in, and on this account it has to stay out in the field all winter. If it is housed and shelled before the cold weather sets in, it is more often than not that there is too much moisture in the grain to keep any length of time. Then when it is shipped out to different states the howl comes up, and very often justly so. Just as there is no way of curing a rotten egg, so after corn has begun to get blue or green in the heart there is no known process that will bring it back to its original sweetness. One may scour and rub all he is a mind to, but the fermentation has done its work, and will not be released.

I have two articles before me at this time, one from a Savannah paper and one from an Atlanta paper, headed "To save cattle from Pellagra," and "Seizing damaged corn that is sold in Georgia." There is one way and only one way that I can see out of this dangerous muddle that the grain shippers have gotten into by shipping green corn, not only to the South, but to all parts of the country, and that is to ship dry corn. And to be able to ship dry corn the dealers must either kiln-dry the grain or get the farmers to plant a variety of corn that will mature before frost.

I have been very much gratified to know that the Nashville grain men and the millers of that city have been alive to this issue and have done what they could to get the Western grain shippers to ship dry corn to that market. I have talked with men in the state of Georgia who have had occasion to feed a great deal of Western corn and they claim the loss of great numbers of fine mules and horses from spoiled corn that was shipped in from the West. If there had never been any spoiled corn shipped to that market they could not claim that the death of stock was due to the eating of such.

Do I receive wet wheat at my mill? Do I receive wet corn at my mill? No, sir-ree; I do not. Who receives the wet corn and ships it out? Is it the farmer? Not much, but he is the fellow that will sell you wet corn if you are fool enough to take the risk of buying it. It is not the elevator man's place to dry the grain, unless he gets a sufficient reduction in price to justify him, but it is his duty to see to it that the grain he ships out is good merchantable stuff. If the elevator man hasn't backbone enough to deduct for moisture when receiving the farmers' grain, for fear of losing a customer, he should stand all losses himself or go out of business.

I am going to make one more guess, and it is that the time has come when it is extremely dangerous to ship damp corn into the South. I have ground corn into chop when every grain of it was blue or green, but under the present feed laws of this state I could not now handle such stuff at all. Some years ago when the writer had occasion to write the first article on "Improperly and Poorly Cured Corn," he was hoping for relief, not from the South, but from the Western elevator men, but it seems that the kick that is being felt is coming from the South.

If I could sell water, or if you could sell water, and get grain prices for it, we would do just what the farmer is doing now, whenever he finds a fool big enough to trade with him on his wet corn. Anyone who lets wet corn get into storage, before it has been kiln-dried is entirely too easy a mark. Whether or not the South is taking the proper course by making such stringent laws in regard to wet corn I do not know, but one thing is very certain, and that is he is very much determined to get a better grade of corn shipped into his territory. Whether it comes through the "Pellagra Scare" or the "Hook-Worm Route" it makes very little difference with the writer, just so we get it,

And it looks now as if there would be a change for the better.

Within late years I have been ready at times to remark as did a fellow at the mill some time ago. His wife was very sick and one of the boys asked him how she was, and he remarked that: "She be bad as h—I and I wish she be making change one way or de udder." This is just the case with the miller when he gets hold of corn to grind that will not make good meal, being too tough, but has not quite water enough in it to warrant rejecting it. The best way for us millers to keep out of any possible trouble is not to grind any spoiled corn. Then if some fellow should die from bad whiskey or indigestion, he could not lay the blame on eating "Pellagrous" corn meal.

DEATH OF GUY A. OLDS.

The Chicago Board of Trade Weighing Department mourns the death of Guy Allen Olds, a popular and capable member of the Department, who died on March 14, after an illness of about four months. He leaves a widow and one child, a bright boy of nine years.

Mr. Olds was one of the best known and most popular weighers of grain in Chicago. He was born



THE LATE GUY A. OLDS.

in Palmyra, Jefferson County, Wisconsin, on March 6, 1862, and attended the country school there. In later years he moved to Whitewater, Wis., where he made many friends. He was a popular member of the Whitewater Base Ball Team, and was always known among his many friends and acquaintances as a base ball enthusiast.

He moved to Chicago in 1889, and was employed by the Chicago Terminal Elevator Co. for about ten years. In 1899 Mr. Foss engaged him for the Weighing Department of the Chicago Board of Trade, and his ten years' service as deputy weighmaster for that organization was a credit to himself and to his employers, and both his employers and his associate weighmen keenly regret his untimely death.

The U. S. Marshall at New Orleans on March 23 seized 836 sacks of oats at the Frisco warehouses, on the charge that the sacks were misbranded and because of the adulteration of the contents. The oats were consigned to John T. Gibbons and the Langenberg Hay and Grain Co., and came from the Pendleton Grain Co., of St. Louis.

The Dominion Marine Association and grain trimmers at Fort William and Port Arthur have reached an agreement by which a flat rate will be paid the trimmers on all grain leaving these harbors the coming season. On the large bulk cargo boats, where the work is comparatively easy, 50 cents per 1,000 bushels will be paid. On smaller and package boats, usually double-decked, 65 cents will be the charge,

THE STATE ELEVATOR SYSTEM.

In spite of the protests of the Grain Growers Association officials, the Manitoba provincial parliament has passed the ministerial bill for the establishment of a grain elevator system, owned and operated by the province, and has appropriated \$2,000,000 in bonds to make a start at the purchase of existing properties. The opposition to the bill on the part of the grain growers was due to the fact that the Government insisted on retaining control over the appointment and supervision of the commission in direct control of the elevator system, while the growers insisted on an "independent commission"; in other words, one responsible to them or to nobody.

"There are in the province at the present time," as the ministry said in the speech defending the bill, "225 mill elevators, 471 private elevators, 26 farmers' elevators; distributed over 312 stations; but it is not contemplated in the government bill that mill elevators will come under its scope. For a good many years there have been in operation in this province what are commonly known as 'Farmers' elevators.' They have usually operated under a charter issued under the joint stock companies' act, and have been individual and alone in the operation of each. The management has varied greatly, and while many have operated most successfully others have not. These elevators come nearer to the principle of a public owned and operated elevator than anything else in the province. The chief competitor with the elevators are the loading platforms which exist at nearly every grain delivery point in the province, and it is claimed that with a satisfactory elevator system these platforms would not be used to any great extent." In the 1908-9 season there were shipped from the platforms 311 carloads against 1,218,400 bushels handled by elevators in the same towns. The estimated revenue on the basis of the charges allowed under the Manitoba Grain act would be \$608,177 if all that grain was handled through government elevators; but the government does not think it would be at first. As the system grows and the benefits from it come to be appreciated by the farmers, it is believed all the grain of the province will be handled through the public elevators.

Sizing up the situation just before the passage of the bill, the Winnipeg press tries to figure out just how the government's plan will develop, and says:

"The total amount of grain storage existing in the province in what may be termed country elevators is 18,645,000 bus. This includes the elevators owned by the large milling companies for gathering wheat in the province, but does not include elevators belonging to local mills at country points or in Winnipeg and St. Boniface; nor does it include seven privately owned elevators in Winnipeg and St. Boniface, with a capacity of 855,000 bushels. If the 18,645,000 bushel storage were purchased, it should not cost more than ten cents per bushel capacity, or \$1,864,500. If anything, this estimate would probably prove high when the ordinary deterioration in value is written off, and the fact is taken into consideration that many of these elevators, as business concerns, are worth very little until they are removed and erected elsewhere, because the territory that formerly contributed to them has been cut off by new lines of railway. If new storage were erected, 16,500,000 bushels would give a storage capacity of almost one-third of the total crop now grown, and would be found quite sufficient, if properly arranged, for the needs of the province.

"The outside cost to-day of building an individual elevator, with up-to-date equipment, is from 22 to 24 cents per bushel capacity. This, according to expert authority, can be cut down 25 per cent in cost on the amount of storage mentioned, making the total cost, were new storage to be erected, slightly less than \$3,000,000. If existing elevators were purchased, a considerable amount would be required to provide cleaning machinery and put them in a suitable condition to serve the purposes intended. If say, \$386,000 were allowed, under this head, this would bring the total cost in purchasing and remodeling the present elevators to two and a quarter million dollars. To estimate the expenditure, however, we have taken the sum of \$3,000,000, which is the outside amount that would possibly be required. Maintenance of 1 per cent is intended to cover painting elevators and other repairs that cannot be done by the operator in charge. Painting would be the chief item, and as elevators are painted only once in four or five years, this annual deduction would be quite sufficient for this purpose. Sinking fund at 4 per cent would more than pay the bonds in 30 years. The other items, such as gasoline, belting, etc., have been carefully estimated. Under the item operators' salaries is included all wages required in the operation of the elevators. The amount set out,

i. e., \$500,000, would probably be found on close examination to be considerably high. Eight inspectors, who would have supervision of the elevators in the province, and office salaries, with printing, stationery and other office expenses, brings the total under this heading to \$550,000, making a total estimated expenditure of \$925,000 against the total estimated revenue of \$1,100,000.

"It would quite likely be found after the system was in operation for a year or so, that the charges would be considerably reduced. In addition to this there would be an indirect saving to the farmers of the province of \$56,000 which they now pay in freight, on what is termed dockage, and the feeding value of same, which at a low estimate is worth \$6.60 per ton—a value of \$120,000, or a total indirect saving of \$176,000.

"The advantage of being able to sell his grain on a sample market would, admittedly, be a great boom to the grain grower and would bring higher prices for his grain. The protection in weights would also mean an indirect gain to the shipper.

"It will be noted that this estimate is based on the supposition that all grain will pass through the elevators. At present 25 per cent passes over the loading platform; but it has been clearly demonstrated that at points where farmers have independent means of shipment, the loading platform is very little used. In addition to this a public system, giving the grain grower an opportunity of offering his grain for sale on sample, and by giving him protection in weights at initial points, would induce him to patronize it as against the loading platform or private elevators, since these could not offer the advantages mentioned.

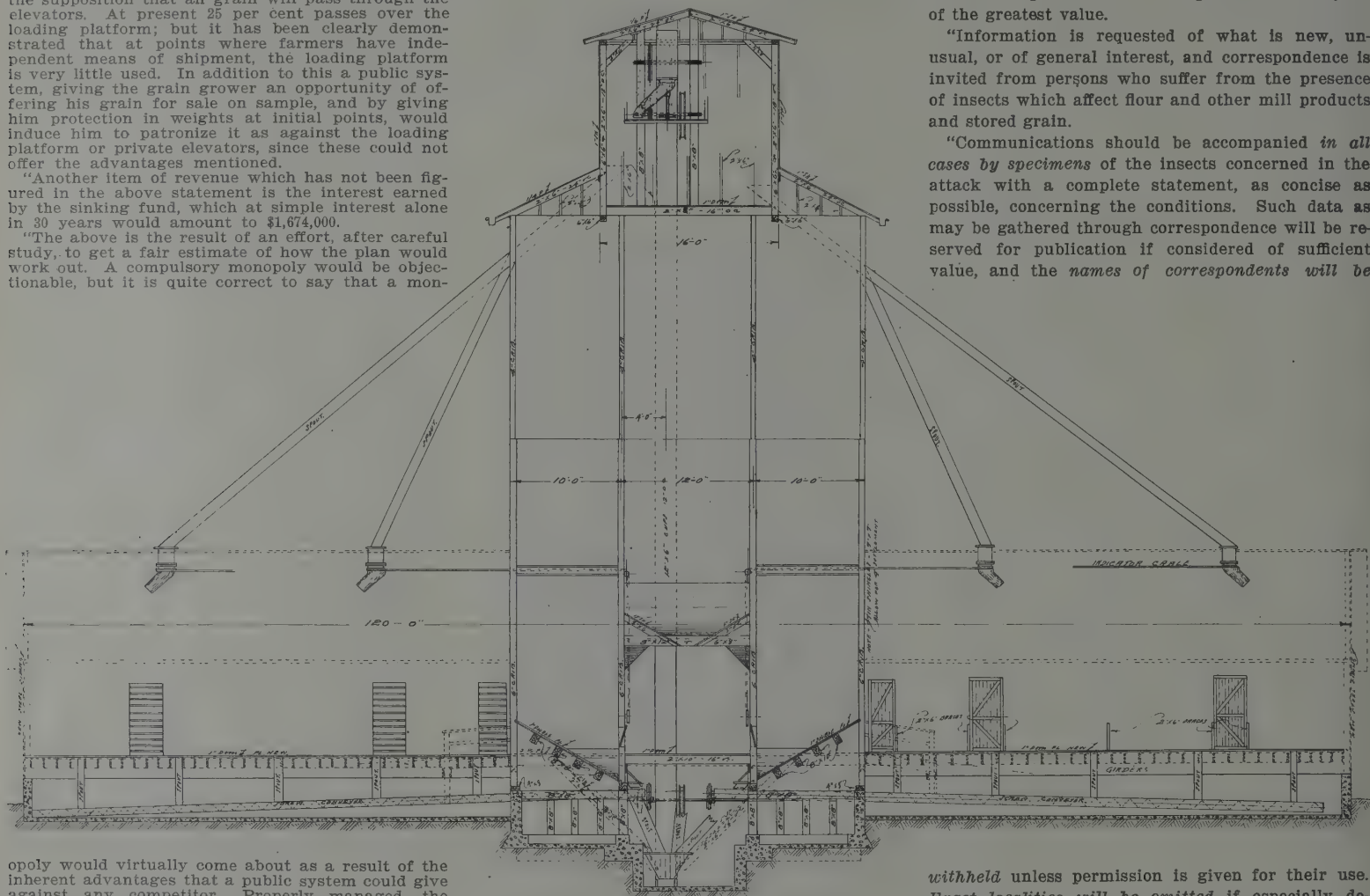
"Another item of revenue which has not been figured in the above statement is the interest earned by the sinking fund, which at simple interest alone in 30 years would amount to \$1,674,000.

"The above is the result of an effort, after careful study, to get a fair estimate of how the plan would work out. A compulsory monopoly would be objectionable, but it is quite correct to say that a mon-

PLANS FOR MISSOURI ELEVATOR.

The plans shown herewith are for a 30,000-bushel grain elevator for the Rea-Page Milling Co. of Marshall, Mo. They were drawn by the Burrell Engineering & Construction Co., Chicago, and the house when completed will be located at Malta Bend, Mo. Included in the buildings is a concrete power house and a frame office.

The driveway is of the lean-to type and there is located therein a 4-ton Fairbanks Dump Scale. The machinery equipment consists of one elevator leg fitted with 12x6 cups, one 1500-bu. Avery Automatic Scale, one Gerber Distributing Spout, one No. 2 Cornwall Cleaner, one 12-horsepower gasoline engine, and all necessary transmission machinery.



— LONGITUDINAL SECTION —
REA-PAGE ELEVATOR, MALTA BEND, MO.

The elevator is located in the center of the old flat warehouse which was formerly used for storage purposes. This warehouse is being remodeled and furnished with a new concrete foundation and will be used for surplus storage. All the buildings will be covered with Sykes galvanized iron.

INSECTS AFFECTING STORED PRODUCTS

The following circular issued by the Bureau of Entomology of the U. S. Department of Agriculture, will be of special interest to millers and handlers of grain and mill products:

"The Bureau of Entomology is engaged in a special investigation of insects which infest stored products, and more particularly such as injuriously attack stored cereals and cereal products. During recent years many complaints are being made of injury to flour in flour mills, in cars used in transportation, in the holds of vessels, and at the ports of destination as well as outgoing ports in this country. Much trouble and very considerable money loss have been occasioned, and the desire for additional information on this topic has been expressed

in many quarters, more especially in the Southwest. The information furnished in Farmers' Bulletin No. 45 has met the want of many early inquirers, but there is growing interest in the subject, and inquiries which reach beyond anything that has been published and which entail a knowledge of the complete life history, including the most minute details, of several species of insects which affect flour are frequently received. We have available for distribution at the present time no special publication which deals with this subject in its entirety, but it is our purpose to issue as found possible documents containing information, general, technical, and economic, in the form of circulars and bulletins, dealing with the most injurious mill pests in this country, and information is desired from correspondents that the publications may be of the greatest value.

"Information is requested of what is new, unusual, or of general interest, and correspondence is invited from persons who suffer from the presence of insects which affect flour and other mill products and stored grain.

"Communications should be accompanied in all cases by specimens of the insects concerned in the attack with a complete statement, as concise as possible, concerning the conditions. Such data as may be gathered through correspondence will be reserved for publication if considered of sufficient value, and the names of correspondents will be

opoly would virtually come about as a result of the inherent advantages that a public system could give against any competitor. Properly managed, the plan would undoubtedly succeed."

The Grain Growers' Association accept the law under protest; and on request of the government sent out the following nominations for members of the commission: John Kennedy, president of the Grain Growers' Grain Company; F. B. McLennan, of the grain commission firm of McLennan Bros.; E. Estlin, civil engineer and expert in elevator construction, who was formerly with the Northern Elevator Company; and W. C. Graham, of the Farmers' Mutual Hail Insurance Company.

"The committee in submitting their nominations," says the Press, "made it very plain that they desired that the chairmanship of the commission should be conferred upon Mr. Kennedy, whose experience in the grain trade and as a practical farmer fitted him for the position of great responsibility. Mr. McLennan was favored by the Grain Growers' Association because of wide experience in the grain commission business and familiarity with the trade; while Mr. Estlin would serve in the capacity of expert on construction and maintenance."

The St. Louis Merchants' Exchange Department of Weights reports 2,766 cars arriving in that market in February in bad order. Of these 361 were leaking at grain doors, 1,419 at boxes, and 737 were not sealed.

withheld unless permission is given for their use. Exact localities will be omitted if especially desired.

"The person to whom the inclosed printed matter and accompanying penalty franks are sent is requested to bring the matter to the attention of some miller, grain dealer, or other person who may suffer from the presence of insects in his mill, granary, or warehouse, who might desire advice in regard to methods of controlling these pests. The experience of persons who have tested hydrocyanic acid gas, bisulphid of carbon, or sulphur, as well as other remedies for stored-product, is also solicited.

"Four-pound packages may be sent under single franks (without postage). Samples of infested cereals are best packed in tight tin or wooden boxes without air holes and should be securely wrapped."

The investigation is in charge of Dr. F. H. Chittenden of the Bureau of Entomology, long a recognized authority on the subject.

Farmers near Wahpeton, N. D. are going to try broom corn this season.

The Argo plant of the Corn Products Company, located near Lemont, Ill., on the Chicago Drainage Canal, has begun grinding corn, and will consume from 10,000 to 15,000 bushels daily. The ultimate capacity of the plant will be 60,000 bushels per day, more or less.

[For the "American Elevator and Grain Trade."]

WHEN OPPOSITES MEET.

BY GUIDO D. JANES.

"Seventy-five per cent moisture," remarked Charlie Rudd, looking at his moisture tester. "That shows just what my mental condition is in. With seventy-five per cent tears around my person, I sure feel dejected and morose."

"It might have been worse," returned Barney, the house foreman. "Your elevator might have burned down. Cheer up; there are worse things than losing two thousand bushels of corn by improper curing."

"Thanks for brightening me up. With your op-



SAUNTERED ACROSS THE STREET.

timism and my wife's humorous nature, I'll try not to target practice on myself. So long."

"So long."

"Well, if he can't get the bluest of anyone that I have ever seen," added the employe when his boss had withdrawn. "It is fierce. Still he is a success in business; but when he loses a hundred dollars he square roots it with his sorrowful mind, and builds air-castles of woe. If—"

"Where is Rudd?" broke in Commission Merchant Watts, coming upon the scene on the scale floor.

"Gone home."

"Too bad;" (almost weeps) too bad. When will he return?"

"This afternoon."

"All right." (sobs) "Good-day."

"Good-day."

"Well, if that don't beat the deuce," added the foreman with copious smiles. "Here is a commission man entertaining lumps in his throat; and here is my boss in a like condition. I wish that I could garner the tearful side of life out of them." (pause). "By golly, I will."

"Unlikes attract, so Jim Abernathy says; and using that for a foundation, I will eliminate their sobs. Here it is winter, and I bet a hat Watts is afraid of a freeze. Rudd—"

Pausing at this point in his monologue, Barney smiled complacently, but instead of doing so up his sleeve, he did so up his boot—one belonging to the elevator. After which he filled the vicinity with merry echoes and telephoned Rudd.

"Say," he began, "dry your tears. Come up here; maybe we are saved."

"How?" was the reply. "Are you engaging in some crooked work? Though I do operate an elevator, I am not blind to corruption. If you have something up your sleeve that will make money taintedly, I will fire you. How? Tell me."

"Come up and I will show you."

Barney then hung up the receiver and sauntered across the street to Watts's place of business.

"I know the cause of your sorrow a few minutes ago," he said, reaching his destination.

"What?"

"You have a lot of apples and potatoes you have to send at once to Chicago, but can secure no steam-heated cars or refrigerators to ship the stuff in without freezing."

"Who told you?"

"Common sense. And I can save you dollars, provided you give my boss half the savings."

"Sure, half a loaf is better than none. But how are you going to do it? Got a stand-in with the railroad?"

"No. Come along over to the elevator. I'll put you next."

The commission man obeyed, and he and the foreman arrived just as Rudd drew up to the place. Both of their eyes were still red from the looking on of the seamy side of life.

"What have you to offer me?" demanded the elevator man.

"Yes," said Watts, "What are you going to do, Barney, to relieve our sufferings?"

"This, sirs. One of you is complaining of the heat; the other of the cold. Why not swap positions and obtain what you want? It's a cinch."

"Talk sense," from Rudd.

"Be rational," from the commission man.

The foreman laughed. "Listen, gents," (ignoring their aspersions) "I'll save you both a fifty per cent loss on the game. Will you do as I say?"

"Yes."

Now, Mr. Rudd, here, is sad because the corn in his elevator has not been cured properly, and is heating despite of his vigilance for the past five weeks. I propose to fill cars half full of this corn, and on top pile the potatoes and apples belonging to Watts. The heat from the one will save the freeze from the other."

"How clever."

"We will do it, won't we, Rudd?"

"Or course."

"Very well, then. Leave the details to me," said Barney. "The produce has to be in Chicago Tuesday. If it is not there then, you lose a thousand dollars. But we will succeed, and half the thousand will go to one and half to the other. Is it agreeable?"

"Yes," cried Watts.

"Of course," echoed Rudd, "and for helping us out in our dilemma, Barney. I am going to reward you." And going to his safe he unlocked it and procured some cash. "Take this," he said, presenting his foreman with a five-dollar bill; "you deserve it."

"Thanks."

The "sweeping" nuisance has again "broken out" at West Duluth, and the police now accuse the train men. On March 21 seven young men in two parties stole 23 sacks of wheat from a car, which, although not open, had not been sealed. One of the gangs carried away fourteen sacks, while the other, composed of smaller boys, took nine sacks. The larger gang, in which there were four boys, sold five of the sacks for \$8 to a Hazelwood man, who claims that he "did not know that the grain was stolen." The other boys sold three sacks for 75 cents each and had delivered the rest with the understanding that they would be paid for it. The grain was purchased by a man keeping chickens. The boys in the older gang carried the grain that they did not sell to a place of hiding in a vacant lot in Hazelwood and covered the sacks up with a large piece of canvas. The grain had been hauled from the car with a horse and wagon. The police have the names of all of the boys implicated in the affair.

[From Circular 55, Bureau Pl. Ind.]

FACTORS AFFECTING THE KEEPING QUALITY OF EXPORT CORN.

BY JOHN D. SHANAHAN,
Crop Technologist in Charge, and
CLYDE E. LEIGHTY and EMIL G. BOERNER,
Assistants, Grain Standardization.

[The authors, in Bureau of Plant Industry, Circular No. 55, give the details of examination of cargoes of American corn landed at European ports in 1906, 1907 and 1908 under instructions from the Secretary of Agriculture to ascertain the reasonableness of the many complaints sent from abroad of the condition of American corn on arrival there, and to ascertain the cause. The examination involved sampling and inspecting a total of 15,077,987 bushels of corn certified as being either "No. 2 Corn," "No. 2 Corn, Sail Grade," or "Prime (Sail) Mixed Corn" at different export points on our Atlantic and Gulf Coast, of which 12.7 per cent was "found on arrival to be in a heating or hot condition, some portions of which were so badly damaged as to be entirely unfit for feeding purposes," while eight out of 175 cargoes were 100 per cent heating or hot.

The study of the parcels, the moisture content of the cool and the hot corn and other phenomena attending both the sound and cool and the hot and unsound grain is a most interesting one, tending superficially at least to prove the contention of cer-



RUDD AT THE SAFE.

tain Illinois dealers that moisture is not the sole criterion of quality; but for general purposes the following summary by the authors of the "factors affecting general conditions" will be found sufficient:]

The rules and specifications defining the grades of "No. 2 Corn" and "Mixed Corn" (the latter being used almost exclusively by one export market) of both the interior and export grain markets of the United States definitely require that corn of those grades shall be "sound" and "dry," and the addition of the terms "Sail Grade" or "Prime Sail" are used upon the inspection certificates of some export markets to emphasize the factor of dryness, yet the cool corn which bore certificates of those grades and was examined in Europe contained on arrival all the way from 12 to 20.6 per cent moisture.

So far as these investigations have progressed, it is not thought possible under ordinary conditions

of ocean transportation for corn or other grain, confined as it is in the holds of the ships, to take on moisture from the air, as wheat from semiarid regions is said to do when otherwise transported to more humid regions, especially when the moisture content of the grain as shipped is high.

HOW CHANGES IN MOISTURE CONTENT MAY TAKE PLACE ON BOARD SHIP.

There are two means by which the moisture content in any part or the whole of a ship's corn cargo may be increased during transit: (1) The transfer of moisture by air currents caused by changes in temperature; and (2) by chemical changes within the corn kernel.

As to the first means, corn containing excessive moisture and situated so the moisture can escape when subjected to heat will give off moisture and become drier. The moisture thus given off in a ship's hold, in case the temperatures in the hold are not uniform, finds its way to the usual air space above the corn and under the deck, passing thence as water to other parts of the hold, where it condenses on the cooler corn, the cooler deck, and the sides of the ship. This process, augmented as time goes on by the second means, may increase considerably the moisture content of the corn in some portions of the hold or cargo.

The second means by which the moisture content of the corn may be increased is by changes in the chemical composition of the kernel, the effect of which is more evident in corn that is heating badly. Conditions of temperature and moisture may be favorable in some part of a cargo for fermentation to begin and continue with more or less vigor. The heat generated in this process is gradually transmitted to the surrounding portions, starting and increasing fermentation, which decomposes the grain and liberates its water of composition, thus increasing the amount of moisture in some portions or in the whole cargo, if conditions are not disturbed, without any addition whatever of moisture from outside sources.

From these causes the corn, in many of the ships examined was found to be damp and heating at the top, while that beneath was cool, and the iron decks and sides of the ships were found to be quite wet with the condensed moisture from the heating corn.

THE "GERMINATING SEASON."

In the grain trade the "germinating season," so called, is understood to be a special season of the year during which grain is customarily planted in the ground. The limits of this season are not very clearly defined, but it is generally understood to extend from about the middle of March to the middle of June. It is generally believed that there is a natural and inherent tendency in grain to germinate during that season, and that the heating of grain in storage and in transit during those months is due primarily to this tendency.

From the nature of the damage usually found in corn in a heating or hot condition in storage or in ships in transit there seems to be good reason for doubting that the germinative processes are responsible for the damage, as such corn does not usually appear to have germinated. Sprouted corn was occasionally found in the cargoes examined, but only at the top of the bulk, where considerable additional moisture had been supplied, either through condensation, as described elsewhere, or from outside sources.

CONDITIONS NECESSARY TO GERMINATION.

In order that corn or any of the grains may germinate there must be present: (1) Air or oxygen; (2) heat; and (3) moisture. If one or more of these are absent germination will not take place, but if all are present at the same time and in sufficient quantities and the germ of the grain be alive, germination will take place regardless of the time, the place, or the season of the year.

There can be no doubt that the same conditions of temperature and moisture that favor germination or the active growth of the germ of the grain are favorable also to the growth of molds and bacteria, as well as the production and action of certain ferments which have the power of changing the composition of the grain kernels, and which in their action produce heat sufficient to cause the heating of the grain.

There is too little known of the great subject of fermentation in nature to enable more to be said than that some kind of fermentation does frequently take place in bulk grain and that this is the principal danger to which damp grain in storage or in transit is exposed.

SHIPMENTS OF "WINTER-SHELLED" CORN.

In the Northern Hemisphere during the spring months the proper combination of the elements favorable to the production and action of ferments is more likely to exist than during the other seasons of the year. The fact that the corn shipped for export during the early spring months of the past several years has been mostly "winter-shelled" corn, which still retained a relatively large percentage of its moisture and in which fermentation had frequently begun before shipment, and the further fact that much damage has been sustained through the shipment of such corn is what undoubtedly or-

iginated and what has perpetuated the idea of a "germinating season."

Corn in which fermentation has begun need not necessarily be hot or even perceptibly heating, but the action is usually indicated by a peculiar faintly sour odor present. The presence of this odor should serve as a warning to the shipper or handler of corn, because corn in which the odor is present soon becomes hot if not frequently and thoroughly ventilated, more especially if its moisture content is high.

THE IMPORTANCE OF MOISTURE CONTENT IN CORN IN OCEAN TRANSIT.

These investigations have led to the conclusion that the moisture content of corn, and of other grains as well, is the primary factor determining their capacity to carry safely in ocean transit without deterioration, and the importance of this factor has been emphasized throughout the work. Corn in which the moisture content is sufficiently low will carry safely under ordinary conditions of ocean transit for any reasonable length of time during any season of the year, no matter where it is stowed in the vessel, while corn containing a high moisture content is constantly in danger of heating at any time owing to a variety of contributing causes.

It has been shown that although somewhat drier corn was shipped to Europe during the spring months, its moisture content was still not sufficiently low in many cases to enable the corn to carry safely at the naturally increased temperatures encountered en route.

Thoroughly air-dried corn contains about 12 per cent of moisture. Such corn may be shipped for export at any time under ordinary conditions with little or no danger from heating in transit, and this is practically true also of corn containing up to 14 per cent of moisture, provided fermentation has not started in such corn.*

CONDITIONS NECESSARY FOR SHIPPING DAMP CORN.

The fact that certain lots of corn contain high percentages of moisture does not necessarily mean that they will not stand ocean shipment safely. The voyage may be short, the air temperature at the time of loading and during the voyage may be low, no disturbing influence such as heat radiated from the ship's boilers may be encountered, and the corn kept practically in cold storage. Under such most favorable conditions a high percentage of moisture may often be safely carried in corn. Cargoes of such corn are often landed upon the quays in Europe in a perfectly cool (cold, in fact) condition, which corn upon being exposed to warmer atmospheric conditions soon "goes out of condition" and becomes hot and unfit for reshipment via the waterways of Europe, as is required of much of the grain received abroad.

THE EFFECT OF HIGH AND LOW MOISTURE CONTENTS.

When corn goes out of condition, the effect of its relative moisture content immediately becomes evident. Corn with a low moisture content requires a much longer time to reach that stage designated as "hot" or to become discolored or "damaged" by the process of heating than corn with a high moisture content, while corn with a high moisture content will heat, become discolored, and lose weight by evaporation quickly, and the processes of deterioration are accelerated with each additional per cent of moisture much more rapidly than the proportionate increase in the moisture content.

When corn of a low moisture content is found in a heating condition, it can ordinarily be restored to its original condition with but a slight amount of handling and ventilating and without much, if any, loss in value through discoloration, while corn with a high moisture content, when heating in any considerable bulk, quickly becomes badly discolored and damaged and is with great difficulty and a great amount of handling restored to a cool condition, and then only with more or less damage to its quality and a corresponding loss in value.

THE MOISTURE CONTENT OF CORN FROM ARGENTINA.

With respect to its moisture content, the corn received in Europe from Argentina appears to have an advantage over corn from the United States, notwithstanding that it must cross the equator and the Torrid Zone in transit to Europe. A number of tests of Argentine corn showed moisture contents ranging from 12.2 to 15.5 per cent. The corn with the higher moisture content frequently arrived in a heating condition but was restored to condition, without much or any change from its original appearance and color, with but little handling and ventilating.

THE DIRT AND FOREIGN MATTER IN CORN.

During the process of loading grain into the hold of a ship, the finely broken particles of corn, dirt, and foreign matter tend to collect and remain directly beneath the hatches, the whole kernels shifting and rolling much more readily than the broken particles and dirt. Owing to this tendency large

amounts of dirt and finely broken corn were frequently found immediately beneath the hatches of the ships examined, and heating and moldy corn was also frequently found in those localities. The heating processes were undoubtedly aided by these collections of finer matter, especially when found in contact with damp shifting boards or other cargo introduced into the hold in a damp or wet condition.

THE STOWAGE OF EXPORT GRAIN IN SHIPS.

Practically all of the grain that is exported to Europe from the Atlantic and Gulf ports of the United States is carried in bulk, with the exception of small quantities placed in sacks, which is used in trimming cargo in order to prevent the bulk grain from shifting with the rolling and pitching of the ship. When a ship carries a full cargo each hold is, of course, filled or nearly filled with grain, but when grain forms only a portion of the cargo one or more holds are sometimes filled with grain only and the remaining holds contain other freight, while in other cases the grain is distributed along the bottom of the ship, each hold containing about the same depth of grain, in which cases other cargo is stowed on the top of the grain.

THE STOWAGE OF DRY AND DAMP CORN.

When the corn is thoroughly air dried it is not a matter of great importance where or how it is stowed, so long as it does not come into contact with sea water, green or wet shifting boards, or damp or wet freight, such as cotton that has been exposed to rain before being loaded, wet lumber, etc.

Where the shipments of corn contained a percentage of moisture much above that of thoroughly air-dried corn it was found in a large percentage of the holds examined that at least some of the corn was heating, and in some cases that all of it was in that condition.

In many cases the damage was confined to the corn at the top of the cargo, where the grain was loaded under and came in contact with damp cotton, copper, or other heavy or wet freight, and where the corn was located against wet shifting boards or along the sides of the ship, where condensation had taken place, while in other cases the heating grain was apparently protected from boiler heat and had no other freight loaded upon it.

THE HEAT RADIATED FROM THE SHIP'S BOILERS AND ENGINES.

Where the heating occurred, the temperature as well as the degree of damage in the corn was not uniform in the damaged portions. When the damaged corn was located in that section of the ship contiguous to the boiler and engine room bulkheads, to the propeller-shaft tunnels, or in the coal-bunker holds, as it was in the greatest number of cases, the greatest heat and the most severe damage were usually found nearest to those bulkheads and shaft tunnels, and less heat and a less degree of damage the farther the distance from them. The usual situation in such cases is indicated in figure 5.

THE LENGTH OF VOYAGE AND ITS INFLUENCE ON CORN.

The length of voyage of grain steamships from Argentina to Europe averages about thirty-five days, from the American Atlantic ports about thirteen days, and from ports on the Gulf of Mexico about twenty days.

The available information and data regarding the length of voyage of the cargoes examined in Europe seem to warrant the conclusion that if corn when loaded into ships is sound and dry, the length of the voyage has little or no effect upon its condition, but when it is shipped with a high moisture content and is stowed in such a way as to be subjected to heat from the inside of the ship or is shipped during the warm seasons of the year when it is subjected to considerable heat from the outside atmosphere, the length of the voyage is a very important factor, especially if the heating begins early in the voyage, in which case the heat is gradually diffused with each succeeding day and a higher temperature is developed in the corn already heating. Thus with each succeeding day more of the sound corn begins to heat and the corn already heating becomes more severely damaged.

A DESIRABLE ARRANGEMENT IN GRAIN-CARRYING SHIPS.

The danger of grain, and especially corn, going out of condition or heating when loaded against the unprotected boiler and engine room bulkheads and over the unprotected or nonventilated propeller-shaft tunnels of grain-carrying ships has led to the construction in many such ships of second or false bulkheads, so placed as to form air spaces of from 12 to 18 inches between the bulkheads of the cargo holds and those of the engine and boiler rooms, and the installation of ventilators for the propeller-shaft tunnels, the air spaces formed by the false bulkheads being also provided with ventilators extending through the decks on the port and starboard sides of the ships.

This arrangement tends to keep the superheated bulkheads, with which the grain would otherwise come in contact, and the shaft-tunnel coverings in a reasonably cool condition by allowing the heat to escape. Ships arranged in this manner, and especially when the additional bulkheads and the shaft-

*None of the corn examined in Europe which contained less than 14 per cent of moisture was found in a heating condition, excepting in cases where moisture had been expelled through the heating processes, regardless of its location in the ships.

tunnel coverings are further protected by a plank sheathing next to the cargo, are very desirable ships for carrying grain or any other perishable cargo that may be affected by high temperatures.

The authors continue with a discussion of the forms of export contracts and the value of American corn in good condition compared with other corn imported by Europe and Great Britain, and concludes with the following statement of the pertinency of European complaint and the following recommendations:

EUROPEAN COMPLAINTS CONSERVATIVE.

During these investigations it was found that the European complaints of deliveries of American corn were conservative, at least in numbers, as several cargoes were known to have been delivered in Europe in a more or less damaged condition and upon which cargoes no complaints were made because of the conditions of the contracts under which the purchases were made and the apparent uselessness of making complaints. The delivery abroad of corn and other grain shipments in bad condition, as shown, has surely had a detrimental effect upon the export grain trade of the United States and has produced a condition which under the present trade methods precludes fair treatment on its merits of American corn in Europe, a condition that is not desirable at times when the United States has considerable quantities of corn to sell. With a view toward overcoming as far as possible the undesirable effects of these conditions the following recommendations are made.

RECOMMENDATIONS.

- (1) That the moisture content of all grain exported be kept as low as possible, in order that high temperatures, long voyages, and other harmful conditions encountered may not cause it to become heated and damaged in transit.
- (2) That corn containing more than 13½ per cent of moisture and wheat containing more than 12 per cent of moisture, at the time of loading, be not stowed in ships against or near unprotected boiler and engine room bulkheads, unprotected propeller-shaft tunnel coverings, or in the coal-bunker holds of ships.*
- (3) That partially artificially dried corn which before drying contained high percentages of moisture or which had been in a heating condition before being partially dried be not shipped for export.†
- (4) That corn that has been partially or wholly artificially dried and that has been mixed with corn not dried that contains high percentages of moisture be not shipped for export.‡
- (5) That all corn shipped for export be made as clean as possible and that care be taken to distribute evenly through each hold broken particles of corn, dirt and foreign matter not removable from the grain, which usually collect under the hatches of the ships during the process of loading.
- (6) That grain for export be not loaded into ships when it is raining and that care be exercised not to admit water in any manner into the holds where grain is stowed.
- (7) That all shifting boards and all dunnage of every description placed in holds where grain is stowed be dry.
- (8) That heavy freight, and especially damp cotton or wet lumber, be not stowed in the holds of the ships upon the top of grain for export.
- (9) That grain for export be not loaded into ships at any considerable time before they are ready to leave port.
- (10) That all grain-carrying ships be provided with additional or "false" bulkheads in such manner as to provide air spaces of from 12 to 18 inches next to and between the boiler and engine room bulkheads and those of the cargo holds; that these false bulkheads and all metal shaft tunnel coverings be reinforced with plank sheathing next to the cargo and that the air spaces thus formed between the bulkheads, as well as the propeller-shaft tunnels, be connected with ventilators.
- (11) That when exporting wheat which contains considerable quantities of wild garlic the advisability of artificially drying and cleaning the wheat in order to remove the garlic be considered.
- (12) That the commercial grades of corn for export be recast and the grading be done in such

*The investigations of the Office of Grain Standardization into the subject of air-dry grain have not been completed, but sufficient is known from observations made during three years' work to enable it to be said that thoroughly air-dried corn contains about 12 per cent of moisture and that corn considered commercially dry contains about 14 per cent of moisture.

Tests made with wheat considered commercially dry ranged from 9 per cent of moisture in wheat from the Pacific Coast to from 12 to 13 per cent of moisture in that from the East and Middle West. Indications are that the air-dry basis of other grains will be found slightly lower than that of corn.

†Observations of such corn in storage and in transit have indicated that it was strongly inclined to heat very quickly, especially in ocean transit. Such corn should be thoroughly dried and thoroughly cooled after drying.

‡As in the case of the corn referred to in the above footnote, such corn also showed a strong tendency to heat quickly in ocean transit. No attempt will be made to explain these phenomena until these investigations have been completed.

manner that the corn may be bought and sold upon the basis of its dry-matter content, considered together with its apparent quality, and that 12 per cent of moisture be considered as a commercial basis from which to figure corn values.

INSTITUTE OF AGRICULTURE.

The committee on foreign affairs of the Senate on March 31 gave a hearing to Hon. David Lubin, father of the International Institute of Agriculture at Rome, and permanent committeeman from the United States, who made a plea for a continuing appropriation of \$15,000 annually for the pay of delegates to the General Assembly of the Institute and for clerical work, as well as to enable the Government to continue its treaty obligations in reference to the Institute. There is a disposition among congressmen, who can bolt without making a grimace an appropriation of twelve millions for two battleships to choke at an expenditure of \$15,000 a year to enable the United States, one of the leading agricultural countries of the world, to participate in the deliberations and work of the Institute, composed of 49 governments of the world.

As part of his testimony Mr. Lubin filed a letter addressed to Hon. David J. Foster, chairman, in which among other things he says:

The International Institute of Agriculture, in December of last year, had so far completed its survey of the work delegated to it by the protocol enacted by treaty by the United States and 48 other nations that it authorized its permanent committee to enter upon permanent lines of work.

The main function so far undertaken is the collection, condensation, and distribution of statistics of agricultural products. This work has been ably established under Dr. C. C. Clark, whom you were good enough to spare from the Bureau of Statistics for that purpose. Following a study of the statistical services of all the adhering nations, made by Doctor Clark and his subordinates, a general plan, modeled on the plan of work of the Bureau of Statistics of your department, was adopted for this world-area service.

Under this plan the United States will be able to conform to the Institute's plans without any material modification of its present system of crop reporting. Most other countries find it necessary to greatly improve their crop reporting services; and satisfactory progress is being made in inducing them to adopt plans which will enable them to supply the required monthly reports to the institute.

Doctor Clark has issued monthly crop reports for January, February, and March of this year. It will be observed that the plan has been worked out for a complete set of reports each month, covering for the entire world area substantially the same products which are reported in the monthly Crop Reporter issued by your department. These reports are as yet complete only for those countries which have a well-equipped crop reporting service.

The tables for the three winter months, when there are not many crop reports required, are issued in part to define which are dependable official reports from the respective countries and to show to those nations which do not have adequate crop reporting services wherein they fall short of helping to meet the need for a crop reporting service for the entire world area of each product.

The tables are a forecast of what the Institute has undertaken permanently to supply to the world of commerce; and their plan has been made possible by the splendid crop reporting service of your department.

The gentlemen representing the various governments in the Institute have grown strongly to feel that official world statistics of production, consumption, and stocks in store are a necessity to give stable markets, which, as you have so often said, are fair alike to producers, consumers, manufacturers, and dealers. They feel strongly, too, that the increase of authenticated official statistics of world areas and quantities will decrease the use of unofficial statistics disseminated by speculative interests, which are often wrong and disquieting, and they freely mention that in American market centers are to be found the most extensive and most objectionable forms of speculation, the pernicious influences of which are felt in all countries.

Indifference on the part of the United States Government to the broadening out of the American plan of official crop statistics may easily be misunderstood by foreign peoples. On the other hand, the conditions for securing the most cordial economic relations along many lines are here afforded.

Mr. Stead, of London, and others interested in promoting world peace, express a positive belief that the International Institute of Agriculture forms a step in relieving sources of international

irritation which will make for harmony and peace. Mr. Stead expresses the belief that this institute, as a step toward international comity and peace, is of equal value with the Peace Conference at The Hague.

That the Institute is a firmly and permanently established institution for world-wide service to agriculture along numerous lines is firmly believed by all who have participated in the two meetings of its General Assembly and by those who have served together for a year on its permanent committee. It has successfully wrought out a plan of administering its affairs, and has reached a clear definition of its diplomatic relations to the adhering nations.

England, Austria, Germany, France, and other great nations send to the Institute leading agriculturists and economists. Both the General Assembly, which is composed of over 100 men and meets once a year or so, and the permanent committee, made up of one delegate from each of the 49 countries, are bodies of men for the most part qualified both by technical training and wide experience to serve the agricultural interests and those who use agricultural products.

Instead of one delegate, assisted by the United States Ambassador at Rome, the United States should have its full quota of five delegates in attendance at each session of the general assembly. As Ambassador Leishman could not leave his official work for consecutive committee service, our Mr. Holmes could represent us on only one of the four committees.

As the permanent committeeman from the United States, I have not required nor would I have accepted a salary. My purpose has not been for gain, but simply and solely to secure the establishment of the institute along sane and constructive lines, which will serve the interests of my country and of the world. My expenses for travel and for clerical services in connection with the institute, it has been my pleasure to give as a donation to the United States and to the institute.

But the time has come when provision in the regular way provided by the treaties, as expressed in the protocol, which is now the constitution of the institute, should be made by the United States Government to assume its full relations to this movement.

The State Department will require an appropriation sufficient to cover the membership fee, the expense of sending five delegates to the General Assembly, to pay the salary of a resident member of the permanent committee, and some funds for clerical services.

SUSPICIOUS OF PEARY.

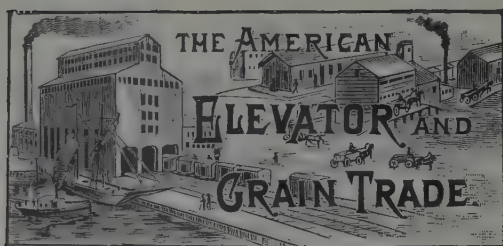
One never knows all of one's friends until he begins to enquire about them or circumstances conspire to reveal the facts of their career that in the ordinary course of business seldom are brought to the surface. For example, there is Capt. Thos. F. Hall, inventor of the Hall Distributor, that has added so much to the comfort and convenience of operating grain elevators, who has recently come into the "limelight," unexpectedly to some, in connection with the holding up in Congress of official honors to Commander Peary.

Capt. Hall it appears is an old-time sailor, having as a boy shipped before the mast and made the trip around the world and become familiar with scientific navigation and navigators' instruments. A trip to Bering Straits turned his attention to the study of Arctic exploration, which has been his favorite avocation for many years.

It now transpires that Capt. Hall is the expert on Arctic travel who is furnishing the ammunition used by Congressman Macon of Arkansas to demolish Commander Peary's claims of having reached the pole. As Peary and Kennan sought to destroy Dr. Cook's claims by showing how impossible were his statements of mileage made in the final rush, so Capt. Hall, out of Peary's own mouth, similarly discredits Commander Peary's distance log.

It is quite evident from Mr. Macon's presentation in Congress that Capt. Hall's arguments have attracted the attention of all those who still remain interested in this last dash for the pole and that Com. Peary must "show us."

On March 16 Gerstenberg & Co., Chicago, received a car of wheat from South Dakota that had been on the way 150 days, or since October 3. The wheat, meanwhile, had become out of condition and entirely worthless. A. R. Sawyer received on the same day a car of oats that had been out ninety-two days, having been shipped from Beloit, Iowa, on December 14.



Published on the Fifteenth of Each Month

BY

MITCHELL BROS. & CO.

OFFICE:

**Manhattan Building, 315 Dearborn Street,
CHICAGO, ILL.**

HARLEY B. MITCHELL.....Editor
A. J. MITCHELL.....Business Manager

Subscription Price, - - - \$1.00 per Year
English and Foreign Subscription, - 1.75 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, APRIL 15, 1910.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

DELAYED REINSPECTIONS.

The Minneapolis and Omaha grain exchanges, pricked to action by the Western Grain Dealers' Association's criticism of their rules permitting unreasonable delay in calling for reinspections, have made haste to mend their ways. The new rules now in force in these markets will be found in "The Exchanges" department.

That of Minneapolis refers to corn only, and was made to fit a situation created by the condition of corn of this crop (1909); and in so far it is fair enough. But why apply the rule to a single grain and to that only when specifically threatened by its moisture content? If a shipper of damp corn is entitled to prompt acceptance or rejection, why is not the shipper of any other kind of grain in any condition also entitled to similar business-like treatment?

At Omaha the rule reads something like a joke, since it permits reinspection to be called for at any time within *eight days* from the original inspection. This is, of course, a vast improvement over the old practice, which required a call for reinspection of grain ordered to mills, elevators, team tracks and warehouses to be made within 24 hours "after arrival as ordered"—which, if the railroad should take a week, a fortnight or thirty days, in making the delivery "as ordered," might mean any sort of delay before rejection. A week is now allowed—surely time enough to let a car of grain go wrong in a slovenly carrier's hands. But is the rule a fair one, even as now amended?

Omaha is a large corn market; but there are other markets that handle quite as much stuff through railroad yards incomparably more extensive, which are able to do business on the basis of rejections within twenty-four hours.

Omaha, Kansas City and Minneapolis ought not to plead "I can't" any longer, in the face of the experience of other great markets which can and do get action within twenty-four hours.

COST OF SPECULATION.

Congressman Scott, at the Republican Luncheon at New York on March 26, made an estimate of the "cost of speculation" to the country, which he guessed was \$180,000,000 a year. Not being of a mathematical turn of mind, nor yet a Congressman, we confess difficulty in following him through this misty maze of 9-figure reasoning, and so abandon him in the midst of the tall timber.

We do object, however, on general principles, to the doctrine that seems to be concealed about Mr. Scott's person and apparently is reflected in his reasoning; that "cost of production" ceases when grain—let us stick to the cereal text—leaves the farm; and that were there no grain exchanges upon which men could "speculate," the cost to the consumer of cereals would be reduced and the rewards to the producer increased.

No thesis of economic argument has been so completely demolished as that, in spite of its perennial resurgence in the "halls of Congress."

Every well-informed economist knows that that part of the cost of production of grain represented by its movement between the farmer and the consumer has been greatly reduced by the media of the grain exchanges in the past fifty years and that this reduction has been equitably divided between the farmer on the one hand and the consumer on the other; and out of this dual service emerges the demonstrable fact that no commodities of any sort or kind are now moved from producers to consumers at so little expense to both, quantity and value considered, as grain.

The muddle that men like Mr. Scott's committee men find themselves in (if they ever find themselves) arises from a misconception. A grain exchange is not a maker of prices—only their recorder—only a place where buyers and sellers meet—a place where the great law of supply and demand may exert itself to the uttermost in making prices. Only rarely do the members of the exchanges themselves do this—it is the great outside public who make the prices—who buy or sell grain through the members who are banded together in exchanges only in order to compel buyers and sellers to live up to their verbal contracts. In these days of telegraph and telephone and great farm wealth, the influence of the farmer himself on prices is more potent than that of the broker. The brokers gather and publish the information from all parts of the world that indicates the supply and demand; but the farmer in the last analyses is the arbiter of the price—he is the man who says, "I will sell"; and until he does speak, all others stand on the order of his say-so; and when he does say "I will sell" (never before that), the machinery of the exchanges takes up the commodities he releases and distributes them over the world without friction and without loss, placing each and every kind of grain in the one spot in all the world where it can be used to advantage—the choicest bread grains and the rottenest black corn—thus literally gathering up

the fragments that nothing be lost and giving to each its fullest value.

Cost of speculation, indeed! It is not what speculation costs the country, but what the absence of speculation would cost that ought to be the real subject of the inquiry and the matter of real concern to the genuine publicist and statesman.

NO MORE DOCKAGE.

The Missouri Supreme Court has affirmed the validity of the state law requiring receivers to pay for grain on the basis of actual weight, thus setting aside the rule of the Kansas City Board of Trade that has countenanced an arbitrary dockage by receivers of 100 lbs. per car. The decision will make good the claim of 100 lbs. per car, that may be made by all shippers who have preserved their bills of lading since the law became operative; and those who followed Mr. Smiley's advice to do this will now have "something coming."

The decision is in line with fairness and modern practice in nearly all grain markets of the world, and should have its influence in putting a stop to the scaleage wherever it now exists. The owner of all other property expects to be paid in full for all he delivers; and he must naturally bear all the loss it may sustain while in his own hands; and in the courts, judges are able to see no variation in this entirely equitable view when applied to grain.

MOISTURE IN CORN.

The corn crop of 1909 will long be remembered as epochal in character. In moisture content it has been unnatural—remarkable, in fact, when coupled with other qualities much more excellent in kind; and therefore the experience of the season will be enough to demonstrate the wisdom of the "moisture test" applied not alone to No. 3, but to No. 2 corn as well, under the most exacting conditions. For this season we have found out that we do not know all that is to be known about water in corn and its carrying qualities; it may yet require a biological study of corn and its ferments to determine as a finality all the conditions under which water-bearing corn may be handled and stored.

Corn carrying water in excess of 13% certainly does behave with provoking uncertainty, however well behaved and soberly disposed it may be with less moisture. Mr. Shanahan and his assistants abroad found, as did some Illinois shippers last winter, a low moisture content in some heating corn and high moisture content in cool corn—some cool corn with 19 and some with as high as 20.6% of water; and 2,000 bus. heating out of a lot of 102,400 that had only 15% of water; but those showings do not prove by any means that high-moisture-content corn is entirely safe. These gentlemen, in Circular 55 of the Bureau of Plant Industry, after study of some 15,000,000 bushels of corn exported during the seasons of 1906, 1907 and 1908, in spite of the apparent paradox and contradictions, are able to declare confidently in effect that only corn of low moisture content is a safe export proposition; and we think 75% of the corn domestic handlers in this country will agree that substantially the same condition ob-

tains in the domestic trade, such opinion founded on their personal experience covering a number of years. On ship board, "when corn is thoroughly air-dried, it is not a matter of great importance where or how it is stored," so long as it does not come into active contact with water or damp goods; and the elevator man will agree that his air-dried corn with 12 to 13% of moisture only never bothers him—he never sits up nights on its account; but he does find a germinating season at any time of year with corn that is palpably damp whenever the conditions of germination or decay (air, heat and moisture) come together, whether that happens in January or May.

THE BUCKET-SHOP AND THE W. U.

One is inclined to agree with Mr. Belvidere Brooks, general manager of the Western Union Telegraph Company, in his reply to the criticism that his company could crush the bucket-shops by merely stopping their "quotations." He said in substance that telegraph companies must accept all messages couched in decent language, "and cannot and should not be permitted to inquire into the character of the message or its purpose." He said leased wires are under the entire control of the lessees and the company has no legal or moral right to investigate the business done over them.

It certainly would be a dangerous thing to permit the telegraph companies to censor messages delivered to them for transmission, their form being unobjectionable. Such an exercise of power would lead to all sorts of abuses, the suggestion of which reminds one of what Lincoln once said, to the effect that no man is wise enough to own another man. Besides, such delegation of police power is not necessary to suppress the bucket-shop which can be reached in more harmless ways. We are all too ready on the spur of the moment to take "short cuts" that are easy but which end mainly in destroying some other body's lawn without accomplishing anything else really worth while.

RE NATIONAL INSPECTION.

A good many people, even some very well informed and thoughtful grain dealers, are of opinion that National inspection of grain is as legally practicable as meat inspection by the Agricultural Department. In a sense it is, because as a matter of fact the meat inspection has not a leg to stand on when objected to. It exists simply because the packers want their meat inspected and so permit it; but a United States judge in Missouri has already decided (as was a year or two ago reported in these columns) that it is legally speaking unlawful, the Government having no power under the Constitution to put inspectors into packing houses that are enterprises under state control. Should an attempt be made to place Federal grain inspectors at any grain inspection point the same doctrine would restrain them from acting in intra-state business, which it would be impossible to differentiate from inter-state; and as there would be no champion of the inspection service—no one to benefit by it, in the same sense that the packers benefit directly by the Government's inspectors' tags on their meats, it would last but a very short time or

would exist only as an inconvenient dual service like the double weighing at East St. Louis.

TRANSIT RULES.

The transit rules proposed in C. F. A. territory have not yet been published, although circulated among dealers particularly interested in transit and among the carriers. They are sharply attacked by the committee representing the Ohio River gateways' interests, as voiced by J. B. Magee, Cairo, and Alfred Brandeis of Louisville, who say "they are so lacking in the recognized essential features necessary to prevent sophistication that they show either a woeful lack of appreciation of the situation or deliberate intent to offer a set of rules which in no way prevent the practices complained of by the Commission." The Ohio River people are strictly against transit, no rules governing which, they contend, can, in that territory, at least, "detect or prevent illegal substitution." The committee therefore ask the Commerce Commission,—

1st. That you issue an order declaring suspended transits illegal.

2d. If you are unwilling to enforce the law as we view it, we then insist that

(a) You declare illegal suspended transits at all primary and terminal markets where there exists a varying shrinkage in rate values, either inbound or outbound; and

(b) At all interior markets and milling points the law be enforced by proper rules and policing, which shall provide that no substitution can be made which impairs the integrity of the through rates.

But Commissioner Clark recently said that the Commission probably would not publish any rules nor say when or how transit privilege should be extended; that the Commission would simply endeavor to prevent "illegal practices."

THE BUCKET-SHOP RAID.

The attack by the Department of Justice on the bucket-shops in the East has been described (let us hope, correctly) as the beginning of the end of that insidious and widespread form of gambling which until April 2 had enjoyed singular immunity from interference by the officials of Uncle Sam's government and which indeed at times seemed to have been rather favored by the sheltering arms of Uncle Sam's judges, some of whom did not appear to be able—in court—to distinguish a bucket-shop from a gentlemen's morning lecture on the higher culture, and so gave the shop keepers the benefit of the doubt. It certainly is gratifying now to believe that at last some one besides the Hon. Mr. Scott of the Agricultural Committee of the House has come to hit upon a "great moral issue" that is.

The indictment of the men arrested by the Department of Justice by the District grand jury has been based on a statute as old as 1902, but this is the first time any arrest was ever made under the law, which, with that singular and convenient way Congress has of "beating the devil around the stump"—blowing hot and blowing cold at one and the same time—applies only to shops operated in the District of Columbia. The shops hit on April 2 all having branches in the District, a pretty broad "theory of the prosecution" may be found necessary to hold the prisoners arrested in New York, Philadelphia, Jersey City, etc.

Here lies the weakness of the case. Everyone knows, as he knows day-light, that the vari-

ous shops raided, or whose managers were arrested, are gambling houses pure and simple—just what Judge Blair of Jersey City called one of them: "a disorderly house"; yet for more than ten years legal technical twaddle—splitting legal hairs "'twixt south and southwest side"—has prevented their suppression even when an earnest effort, like that carried on for years by the Chicago Board of Trade, has been made to wipe them out of existence. The public will therefore wait with profound awe and more patience for the judicial verdict "of last resort" in this case, however long it may be delayed.

PRICE ON A DRY-MATTER BASIS.

The table printed on another page, prepared by Mr. Shanahan and his assistants, showing the relative worth of grain on a dry-matter basis, is quite apropos in the West at this time, after the experience of the heavy discounts on over-wet corn. The difference of value shown by the table between 19 per cent and 20 per cent moisture corn, for example, is not so "violent" as the actual discounts at Chicago were; but perhaps the makers of the table were not estimating such difference from the receiver's end of a "3 or better" contract; but it is not much different from the discounts asked in Iowa by large users of corn, like the Quaker Oats and Corn Products concerns, who are or recently were bidding shippers for corn track their stations on basis of moisture test, with a penalty on this excess of moisture over 19 per cent, graded on a basis of a fixed amount over that limit, that amounts, in effect, to about $\frac{1}{2}$ c per bushel for every 1 per cent excess. Nevertheless, the table shows clearly enough that water in corn is badly "misplaced matter" and does appreciably depreciate the value of the dry-matter content. The table, of course, has in some respects a scholastic value only; for in the market the ultimate criterion of value is the demand; and if the market is overloaded with wet corn, as Chicago in particular has been the past winter, the theoretical dry-matter value difference is swept away by the greater pressure of a surplus of a particularly kind and quality of corn seeking buyers. However, that fact does not in the least militate against the value of the table as a theoretical guide to the ascertainment of value practically.

ANTI-OPTION BILL.

The "anti-option" bill has appeared. It hits only the cotton exchanges and all those wicked people who would attempt to deal in cotton they may not actually have in their coat pockets—who deal "without intending" that there shall be a delivery. But who are going to be the mind-readers—Congressman Scott's committee or the messenger boys of the telegraph companies? Or will the Government place an expert at every telegraph office to compare brokers' and clients' messages with their affidavits on file with the companies guaranteeing that all messages are from bona fide holders or buyers of cotton in sight? Such machinery to "make legitimate trade safe," should it ever become law, would be more of a nuisance than all the alleged gambling the committee is afraid of.

EDITORIAL MENTION

Tag your corn cars "perishable freight."

The cash contract margin is still a live issue.

Virginia's pure food and feed commissioner forbids the sale in that state of grain that arrives there out of condition.

Fire continues to try the concrete tank, but in every test the concrete demonstrates its almost perfect resistance to the destroyer.

The Michigan Railway Commission at least has the right idea of the new Demurrage Code and proposes to resist its operation in its present form in that state.

Pittsburgers are going around with heads up like "steers in the corn." Their new Grain and Flour Exchange quarters are classy enough to make any one proud.

The mountain states of Colorado, Montana and Idaho are coming to the front surprisingly fast as grain producers, with New Mexico, Utah and Wyoming waking up to take notice.

The amendments to the Hepburn act are now before Congress and under active discussion; if you like them or dislike them, tell your Congressman what you think; it will help some for your side.

Louisville revels in the luxury of two sets of grain inspectors—the Board of Trade's and the Agriculture Commissioner's. There seems to be no friction because only one dealer uses the state's service.

The people of Kansas City have subscribed a million dollars to start a boat line on the Missouri—which reminds one of Disraeli's definition of a second marriage—"a triumph of hope over experience."

Cut out of your mind the idea that only in "the germinating season" does grain go wrong. It goes wrong at any season if the conditions of air, heat and moisture are simultaneous, whether that be in December, January or June.

The Boeotian of the Co-operative Journal honored this journal in a recent number by an apparently furious attack; but if some one will only enlighten us as to what it means or what it is driving at, we shall be greatly obliged.

More "adulterated" oats were seized by the U. S. Marshal at New Orleans on March 23, that were not up to "label" (description)—another reminder that shipping oats South is a somewhat risky business unless the goods are equal to the price.

Mixing in Manitoba terminal elevators has raised a great row where skinning the grade is not so readily assented to as the natural and inevitable thing as it is in this country; and a rumor that some elevators are doing it has been enough to start a parliamentary inquiry. These "Canucks" are getting to be so "blamed

cranky" in the elevator business no one can know where he is at up there.

"Unscrupulous market letters" influence only those who don't know the writers; and men who take business advice from sharpers interested on the other side are hardly worth worrying about anyway—the wisest man or law on earth can't prevent fools from acting after their kind.

Baltimore provides for an early inspection of the physical condition of grain cars immediately on arrival by representatives of the Chamber of Commerce and the railroads, whose reports carry the signatures of each. And so another cause of dispute on a shortage claim is eliminated.

The demurrage rules in the various markets are so mixed nowadays that shippers will be largely in the hands of their receivers for protection. Bear this in mind when you select your commission man and know that he is a man who takes pains to look after his customers' interests in all things.

J. H. Brown, the noted "co-operator" of Iowa is dead. He was for many years at the head of the movement in Iowa as one of the founders of the Rockwell company, which his shrewdness and tact had made quite successful. Not a few parasites of the movement in Iowa have achieved some degree of notoriety by basking in the light of his wisdom.

The "penalty clause" advocates are elated up in Minnesota; because, while it is generally believed that this objectionable form of "protection" is illegal, an astute Dogberry, in a suit against a member of a co-operative company to collect the stipulated forfeiture, gave judgment against the farmer. The latter, however, will carry his case to the end.

A full cargo of Argentine flax arrived at Philadelphia recently—4,200 tons; and doubtless the profit was a handsome one. The flax problem has indeed become a serious one to the crushers, who "met up with" \$2.31 a bushel for seed last month in the Northwest. No wonder the crushers are sowing that part of the country with flax seed literature, begging farmers to grow more of it.

A North Dakota farmers' elevator manager has done a good thing by preserving samples of no less than twenty-six varieties of noxious seeds taken from wheat warehoused by him. Whether this demonstration of the farmers' method of handling the weed question will avail to check it, is a question; but at least the agent should be commended for his wisdom in calling attention to the conditions.

The April crop report was in Chicago by 11 o'clock a. m., and there was no complaint. It was over two houses before the close and every one had a fair chance to digest it. But it is still an open question whether it would not be fairer for all concerned—the country shipper and the farmer, as well as the receivers—if the report were not published until some time after the close at 1:15. The impression is abroad that the June report may be so given

out; if so, an opportunity will then be given to compare the effect of the time of publication, the variety of hours of issue having this season been ample enough to test the question from pretty nearly every standpoint.

The Kentucky Commissioner of Agriculture published his first crop report for 1910 on April 4; and made a sensation—not because the state of Kentucky, great as it is, is quite equal to the task of tip-upping the cereal world; but a report of wheat condition of 50 (corrected later as 94) is disconcerting to the traders, who are inclined to think that a crop smash of that extent in one locality is likely to be reflected in other parts of the same winter wheat belt.

Something like 2,000 or more cars arrive in St. Louis in bad order every month—leaking wherever there is a chance to leak and seals gone. Now, surely, the shipper can hardly expect anybody to believe under the circumstances that he is never to blame. A little care, a dollar or so spent on paper or cheese cloth liners and due respect for the virtues of a car seal, would do much to reduce this rather disheartening exhibit of carelessness. The gods help them who help themselves and they generally desert those who are slovenly in business.

We like Bert A. Boyd's "Rules" for success:—

Throw up a brick (no margin required while brick is up).

Rule I. If the brick stays up—BUY

Rule II. If it doesn't come down—SELL.

Rule III. If it does come down—CONSIGN.

Of course, you should consign to Boyd; but if you can't or don't consign to Boyd—why consign just the same, because it pays in the long run. You get the price for the value and the buyer stands on the same ground you, the consignor, do; in a "3 or better" deal the shipper holds the unhandled, or smooth, side of the jug.

One likes Mr. Merrill's uncompromising stand for the public exchanges. His assertion that the "Golden Rule" is nearer the practice in business on the grain exchanges than elsewhere in business circles was bold, but it was true; not that all members of the exchanges are like Caesar's wife, nor above taking the advantage in a deal; but the rules are working nearer and nearer to perfection daily; the "call" has reformed one end of the business, and the disposition of the exchange to prevent palpable manipulation is getting after the other end. But no rules of any body can correct the blunders of business men themselves.

The promulgation of the Demurrage Code has made another muddle, because in some states local railroad commissions have refused to authorize the Code in its present form. In Chicago there is free time enough under the Code—if everybody hurries; for as to grain the new rules cut down the free time for unloading from seventy-two to forty-eight hours and the free time for reconsigning from forty-eight to twenty-four hours. However, under the Code as reported for adoption there is Rule 9, which provides for an "average" agreement by which a receiver may elect to pay the balance against him at the end of each month; but the agree-

ment must be made in writing and be a continuing one.

People resident along the line of the Hennepin Canal and its feeders in Illinois are still trying to convince themselves there is a great future for that waterway, although some two seasons of navigation have not developed trade enough to pay the salaries of the locktenders. However, there are some corn elevators on its banks; and we have no doubt that the existence of the waterway, even if it does no business, is worth while as a "club for rates."

As stated all through the winter by Prof. Holden and others, the condition of seed corn is very serious. In Iowa, in a seed testing itinerary, Prof. Bowman found that about 50 per cent of the corn that had been put aside for planting was dead. The outlook therefore is bad all over the corn belt; and every effort should be made now, even at the last minute, to impress on farmers the future profit there will be in planting tested seed only, no matter how much it may cost.

The abandonment of cotton in many sections of the South on account of the boll weevil is likely to have its influence on the corn trade in the Southeast and may eventually restrict that market somewhat as regards Western shippers. The rice growers of Texas also are likely to feel the influence of the new rice country being opened up in the northern part of the Yazoo River Valley where that cereal in the past two years has shown most promising results—quite as great as on the best Arkansas rice lands.

The Duluth wheat receivers have promulgated a rule that, after August 1,—

The buyers representing the various elevator interests at Duluth have decided that any purchases of wheat to arrive which they may make shall be understood as meaning wheat free from kingheads even though the cars should grade 1 Nor. All wheat containing kingheads will be bought on its merits regardless of the state grade or dockage, but under no circumstances are any of the cars to be applied on sales that have been made to arrive by the various receivers.

But what do the Duluth rules say on this point? If the proposed practice is right, the Rules should provide for this action, otherwise the precedent will be enough to enable buyers to override the rules and make them over in a way to make "ducks and drakes" of the discipline of the Board itself when it suits them to contravene the rules.

Just prior to the Russo-Japanese war there was much magazine prediction of wonderful things that would happen in the Far East, that have not happened simply because the "East is East and the West is West and never the twain shall meet," or something like that. It is men, not climate, that do things; and we can never quite be sure of prophesying about men until we thoroughly understand them and their habits and manner of thinking. So the great practical value of Mr. Kuné's articles on "Russian Agriculture," now appearing in these columns, is that he is telling us about the Russian farmer, whom he knows by personal contact, and the way the Russian is now approaching the great agricultural problem. That Russia is certain to be, in the future, a greater factor in the foreign wheat market than the United States seems

sure; but all attempts to set the bounds of time and volume of Russian accomplishment must be modified by our knowledge of the Moujik and his ways.

Shippers of damp corn—or any kind of corn—should take a hint from the action of the Chicago grain committee when passing on No. 2 corn 16 per cent of moisture:—The grain offered for storage as 2 must have its moisture evenly distributed; it cannot be composed of lots of corn with 12 per cent and 20 per cent of moisture, thus averaging 16 per cent. So, too, if shippers will take care to make up the car of grain of uniform quality throughout, whatever it may be, it will under all circumstances command a better price, especially if consigned.

The railroads' latest suggestion is to make a charge of \$1 each for freight tariff schedules. Railroad management of late seems to be running desperately to the "small"; and this is pretty near the limit. Of course, it is understood that the carriers are not required to provide a copy of their rates for every person who asks for it, although they must have one on view; but certainly the common courtesy of a "catalogue" on request is not too much to ask of a railroad when it is common practice to issue them on request by firms whose booklets cost many times that of a "freight schedule."

Senator McCumber of North Dakota complains because his constituents sell wheat at 90c a bushel that retails for three or four dollars when made into bread and at \$37.50 per bu. when sold to him in the senate restaurant; and in righteous indignation he asks, "By what law have the citizens of the city a greater right to luxuries than the tillers of the soil?" There is no such law, of course; and in point of fact, the city men have few or no luxuries, other than that of starving in a crowd, that the farmers have not. But, "going back to our mutton," the Senator might be asked, Why does the state of North Dakota employ Mr. McCumber to be senator when there are thousands of men in the state who would be glad to take the job at half the salary?

As a pretty good example of what it means for a big grain producing region to be without a public grain exchange or universal market, we are told that the wheat "millers and farmers at Walla Walla, Wash., are unable to agree on prices of wheat and as a result the deadlock continues. There has not been a sale since the early part of last winter and quoted prices are practically meaningless. While \$1.10 is asked for bluestem, it is not being sold. Occasionally a small deal is made at a lower figure. 'Not much more than \$1' is what the mills will pay. There has been just enough leaking out of grain in small quantities to keep the mills from shutting down; but export buyers are out of the market and have been for months, as there is not enough wheat in sight to make it worth while. In several deals the farmer who would not sell to a mill direct sold to a middleman, who takes out a profit before the grain reaches the mill. It is given out that the mills may refuse to pay the high price for grain until the new crop breaks the market." Wonder how the

farmers and millers of Illinois, Kansas, Iowa, etc., would like that sort of thing?

One John F. Johnson of Logansport was found dead in the Wabash, the other day. He had served six years in prison following his confession that he had embezzled \$550,000 of his bank's funds, and since his release he had been a grain broker; *ergo*, says the popular (or populist) reasoner, "gambling on 'change must go,"—*delenda est Carthago*. Seriously, however, we think the policy adopted by at least one Chicago commission house we know of—never to accept a speculative order from any bonded public servant or officer of a banking or trust company, or from a man occupying a fiduciary position of any kind, is a wise and safe one, from both a moral and a financial standpoint, for acceptance of orders from such customers carries with it grave financial as well as moral responsibility in case of a breach of trust.

Prof. Cyril G. Hopkins and Secretary Wilson are "in the throes of a controversy." Prof. Hopkins is the prophet of the worn-out soil and better farming for soil conservation; while Secretary Wilson is the "Great Optimist," who as much as intimates that Prof. H.'s theories are punk, holding, as he does, substantially that, "Practically all soils contain sufficient plant food to produce good crop yields and that this supply will be indefinitely maintained." Secretary Wilson being a statesman naturally sees that the perpetuation of our natural resources must obtain because they have been in the past; Hopkins, the scientist, holds that you cannot eat your cake and have it, too—that if you remove plant food in any way from a soil it must be restored by some artificial means. It's very interesting. Can't the Illinois Association management engage both gentlemen to "talk it out" at Decatur?

Both cash grain houses that went to the wall in Chicago during the past thirty days were overloaded with moisture-laden corn, of which the Chicago market as a whole has been carrying far too much. The winter season has been a trying one and a deceptive one, too. The outlook last fall was most optimistic, and before the crop had become ripe probably 50 per cent of it had been sold to arrive during the winter months and before its quality was known or could be known. Shrewd receivers on 'change threw out their warnings against this way of doing business and the press tooted our "me too!" but before December arrived the flood of grain was immense—water and all—in every direction; and December and January were ideal months for wet corn. The Chicago receivers who had to carry the most of the water did their utmost under the circumstances; and the failure of some was talked of as not impossible and was no surprise to the trade, although these two houses were not suspected of weakness; but a scapegoat was looked for. Apparently the trade is in luck; since the disabled houses are firms of the highest reputation and unless some unusual condition intervenes both are likely to pay out dollar for dollar, and, let it be hoped, soon be able to resume their regular course of business.

TRADE NOTES

John P. Lenox, secretary of the Webster Mfg. Co. of Chicago, Ill., is taking a few months rest from business at Pasadena, Cal. Mr. Lenox has been in poor health for some time and is gaining renewed energy at the coast. He is expected home in the early summer.

Two very handsome pictures of the Jewel Rapid Small Sack Packer, manufactured by the S. Howes Co. of Silver Creek, N. Y., are shown on an April calendar. They are designed for packing sacks from 2½ to 25 pounds and are said to be the most rapid packer ever built.

J. N. Nutt of Sidney, Ohio, has acquired the patents and rights to manufacture and sell the Chief Ear Corn Feeder, formerly controlled by the National Folding Machine Co. of Sidney. Mr. Nutt has arranged with the Philip Swift Mfg. Co., of Sidney, Ohio, to manufacture the machine.

The Union Iron Works of Decatur, Ill., have again made an addition on their plant to meet the demands for increasing business. This latest addition is the grey iron foundry, 50x80 feet, built of concrete. Will be used entirely for brick moulders and will increase the plant's capacity from three to five tons of castings per day.

Owing to the very large demand for the handsome Crystaloid Hanger sent out last fall to the grain trade by the Huntley Mfg. Co. of Silver Creek, N. Y., the supply was exhausted early this year. The company has now replenished its supply and will be pleased to send one of the Hangers to any one in the elevator or grain trade on request.

In presenting last month the picture and write up to our readers of P. H. McAllister we stated erroneously that he occupied the position of secretary and general manager of the Burrell Engineering & Construction Co. Mr. McAllister is secretary and office manager. Mr. G. T. Burrell is the general manager of the company as well as president, and has placed the Burrell company in a foremost place today as builders of grain elevators.

A short time ago, the Joseph Dixon Crucible Company of Jersey City, N. J., for the first time in eighteen years took up a belt in one of its mill rooms. For eighteen years about 30 belts in that room had been run constantly; the belts are about twenty-five feet in length and six inches in width. There is a great deal of graphite dust in the room yet these belts have run satisfactorily without breakage or without being taken up for eighteen years. The belts are regularly treated with Dixon's TrACTION Belt Dressing which comes in paste form and which is one of the best leather preservative belt dressings made anywhere.

The Ansted & Burk Company have awarded a contract to Macdonald Engineering Co. of Chicago to design and construct a reinforced concrete grain elevator of 150,000 bushels' capacity, to be erected at their mill plant in Springfield, Ohio, the elevator to be equipped with machinery that will handle grain at the rate of 8,000 bushels per hour. This will include three elevator legs, one cleaner with Cyclone Dust Collector, car shovels, car puller, hopper scale of 1,600 bushels capacity, steel spouts, steel elevator legs and a belt conveyor to convey grain from the new elevator to the present mill plant, and a system of spouts to the present steel storage tanks. Work has already been started and the whole plant is to be ready by July first.

Catalogue R, just issued by the Charter Gas Engine Co. of Sterling, Ill., shows their engines in the different constructions, sizes and combinations. The construction of the Charter makes plain its extreme simplicity the fact being evident as it has no small or delicate parts and its moving parts being reduced to the minimum number it is so simple and compact that it is next to impossible to get out of order. All this is set forth very plainly by illustrations in the catalogue and there are cuts and descriptions also of the stationary engines combined with pump, deep well pumping attachment, with hoister, with boats and with dynamos. There are

also shown portable and semi-portable engines and sawing outfits. The catalogue, like all its predecessors, has an attractive cover and is printed in clear, bold type on enamel paper.

The Philip Smith Mfg. Co. of Sidney, Ohio, has made arrangements with the Barnard Machinery Co. of Enterprise, Kan., to handle a complete line of the well known Ohio shellers, cleaners, drags, dumps, manlifts and elevator supplies. The Barnard Machinery Co. has a perfect sales organization, is one of the best known firms in the southwest and it may be expected that the very excellent lines of machines of the Philip Smith Mfg. Co. make will have still wider sales in southwestern territory.

Fairbanks, Morse & Co. of Chicago, Ill., have just issued their new catalogue No. 113, which fully describes and illustrates their 1910 line of two-cycle marine engines. This catalogue is well gotten up, beautifully illustrated with many fine halftones, printed on a high grade enamel paper and contains complete descriptive matter, being a very handsome and useful catalogue. For 1910 they are offering two types of two-cycle marine engines, namely, Types "E" and "G." The new Type "G" takes the place of their 1909 Type "F" and is a marked improvement over same. It is built in sizes from 6 to 45 horse power, is made in one, two, three, four and six cylinders and embodies all the latest improvements. A special feature is the "auto control" which makes it particularly adaptable to boats where the engine is located forward and controlled from the cockpit. The Type "E" engine, 3½ horse power and 7 horse power, single and double cylinder, is practically the same as their 1909 model, except that a few changes have been made which add greatly to its appearance and efficiency. The beautiful finish, easy accessibility of parts, easy starting, high grade material and workmanship and efficient oiling system are some of the strong points of their 1910 line of two-cycle Marine engines. The Four-Cycle Heavy Duty Fairbanks-Morse Marine Engines are fully described and illustrated in Catalogue No. 112B, which is very attractive and which contains complete information covering this line. These engines are already well known and hold an enviable reputation for reliability and service. They are built in sizes from 20 to 100 horse power in two, three and four cylinders.

VALUE OF FIRE PROOF POWER HOUSES.

Fire Bulletin No. 3 of the Michigan Millers' Mutual Fire Insurance Company is entitled "Fire Proof Power Houses," and brings out in a striking manner the advantages of such construction. Says the Bulletin:

"On February 24, 1910, spontaneous combustion in slack coal in the Fayette Mill & Mercantile Company's boiler room at Fayette, Mo., caused a damage estimated at only \$50, yet the fire was so hot when the engineer came to start fire under the boilers in the early morning that he could not get in. The assured writes us as follows: 'Beyond any question the fire started from coal getting hot enough to set wood and cobs on fire. It made a big blaze and if roof and floors had not been all iron and stone would surely have damaged the engine and boilers and possibly gotten into the mill. . . . The steel roof rafters and beams cost over \$500, but if the fire had occurred two years ago, when roof was wooden, the power house would have been wrecked.' A wooden partition kept the coal away from a passageway and this partition constitutes the principal item in the loss. It will be replaced by a steel partition.

"Two points in connection with this fire are instructive: First, spontaneous combustion of slack coal is *not a myth*; second, \$500 invested in a fire proof roof on brick power house saved this miller many days' shut down, if not the total loss of his property by fire."

The actual showing made in the case set forth in this bulletin should convince the most skeptical that money invested in fire proof power houses is well invested. And it should also serve to silence those who persist in asserting that "there is no such thing as spontaneous combustion." It will

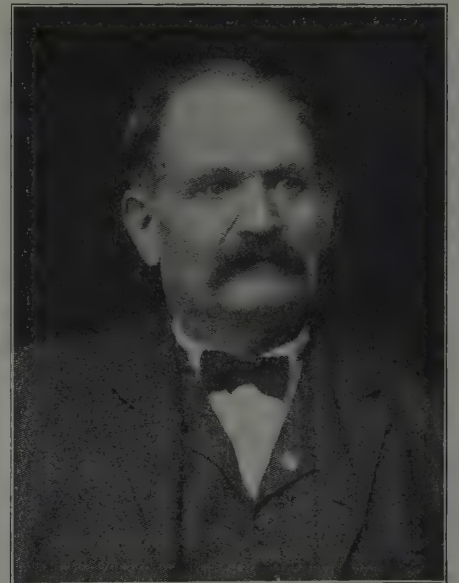
seem very real when they have to pay out good money for the damage it has done.

DEATH OF O. M. MORSE.

Orville M. Morse, inventor of the Cyclone Dust Collector now manufactured by the Knickerbocker Company of Jackson, Mich., died in that city on March 8, and was buried from his late home on the 12th, the commitment service being conducted by the B. P. O. Elks, of which Mr. Morse had been a member for some twelve years.

Mr. Morse was a native of Cayuga, N. Y., where he was born on November 17, 1844. While he was yet of the school boy age the Civil War began, and he enlisted at Lincoln's first call for troops. Re-enlisting after the three months' service, he became a member of Company C, 124th N. Y. Inf., serving for two years, after which he again enlisted "for the war" as a veteran, in the 184th N. Y. Inf. He had hospital experience with fever, but never seems to have been injured by shot, and was mustered out on July 3, 1865, returning to his native state. In 1884 Mr. Morse went to Jackson, where he entered the employ of the Knickerbocker Company, a connection which ended only with his death.

Mr. Morse was a natural and trained mechanical expert and made mechanical invention the business



THE LATE O. M. MORSE.

of his life. His dust collector was, however, his most successful effort and is sufficient to establish his reputation.

His surviving family consists of his widow, Mrs. Sarah Gertrude Morse; three daughters, Mrs. Geo. D. Jones of Springville, N. Y.; Mrs. Gordon W. Welch and Mrs. Arthur Devenport; two sons, Charles F. and Orville K., all of Jackson; a sister, Mrs. Clark Fuller of LaFayette, Ind.; and two brothers, William S. Morse of Oswego, N. Y., and Theodore F. Morse of Silver Creek, N. Y.

Mr. Morse was a generous, likable character and a man of fine character and the highest personal integrity.

The "shipper's order" bills of lading in use by carriers provide for, "The surrender of the original bills of lading properly indorsed before the delivery of the property. Inspection of property covered by the bill of lading will not be permitted, unless permission is indorsed on the original bill of lading or given in writing by the shipper." This rule is imperative and it is the intention and practice of the carrier to adhere strictly to these provisions. It is necessary, therefore, when you desire to allow inspection of goods consigned "shipper's order, notify," to indorse upon your order bill of lading, "inspection permitted," or "allow inspection at destination." Without some such proper permission indorsed upon the face of the bill of lading, it is understood inspection will not be permitted at destination.

ELEVATOR AND GRAIN NEWS

ILLINOIS.

The new elevator at Downs, Ill., is now receiving corn.

The Farmers' Elevator Co. of Thomasboro, Ill., is installing automatic scales.

The stockholders have decided to sell the elevator of the Lewistown Elevator Co., Lewistown, Ill.

George L. Weirather will install a Hall Signaling Grain Distributor in his elevator at Bushnell, Ill.

The Farmers' Elevator Co. is building an addition to the north of its elevator in Lovington, Ill.

The Burr Elevator in Bement, Ill., has been razed and will be erected on Mr. Burr's farm south of town.

The Pontiac Farmers Grain Co. of Pontiac, Ill., has increased its capital stock from \$15,000 to \$20,000.

There is a movement afoot to raise \$10,000 by stock subscription to start a farmers' elevator in Minonk, Ill.

Ralph Puterbaugh is building an addition to his elevator in Mackinaw, Ill., in which he will install a feed mill.

A permit has been granted the Armour Grain Co., to erect a one-story brick grain shed on Weed street, Chicago.

Pine Bros. are building a flour house at their elevator in Bluffs, Ill., to handle flour in connection with their grain business.

B. B. Tackwell, a farmer, has purchased the elevator property of the Paxton Grain Co. in Paxton, Ill., owned by W. T. Westbrook.

George F. Harweger of Cissna Park, Ill., has traded his elevator at that place for a quarter section of land in White County, Ind.

A permit has been granted the Moe W. Curnt Mill Co. to erect a 70-foot concrete grain house west of the Calumet river on 104th street, Chicago.

The F. J. Davis Grain Co. of Tremont, Ill., has been incorporated with \$15,000 capital to do a general grain business by Frank J. Davis, Ura S. Davis and August Schneider.

A meeting of stockholders of the Winslow Elevator & Machine Co. will be held in Chicago April 15 for the purpose of considering the advisability of dissolving the corporation.

Two Western Shellers were shipped to Port Natal, South Africa, and one to Jimines, Mexico, recently by the Union Iron Works of Decatur, Ill. A shipment was also made to Buenos Ayres, South America.

The Woodland Farmers' Elevator Co. has been incorporated to deal in grain, building material and farm machinery in Woodland, Ill., with \$8,000 capital by John I. Body, Samuel John and M. C. Williams.

John Langdon, who is making extensive improvements on his elevator in Eldred, Ill., has placed his order for machinery, including a Western Pitless Sheller, with the Union Iron Works, Decatur, Ill.

J. A. Davis, who has commenced construction work on his new elevator in Sullivan, Ill., will install a Western Pitless Sheller and Rolling Screen Cleaner, manufactured by the Union Iron Works, Decatur, Ill.

The grain business and feed mill in Morrison, Ill., which was owned and managed by the late Abel Renkes, will hereafter be conducted by the three Renkes brothers under the firm name of Renkes Bros.

The Hull Milling, Light & Canning Co. of Hull, Ill., has been incorporated with \$10,000 capital to do a general elevator, milling, canning and merchandise business by George W. Lay, A. L. Maple and J. W. Kuhlman.

The Yuton Grain Co. of Yuton, McLean County, Ill., has been incorporated with \$4,000 capital, to deal in grain, live stock, coal and farmers' supplies by J. N. Hilton, Fred Basting, A. E. Otto, Jacob Schad and L. W. Snavely.

The Illinois Grain Elevator Co. has been incorporated with \$10,000 capital to operate grain warehouses, grain elevators and to deal in all kinds of grain by R. J. Pendleton, J. M. Pendleton, L. A. Cooksey, L. A. Cash and A. D. Pendleton.

The Camp Grove Farmers' Elevator Co. of Camp Grove, Marshall County, Ill., has been incorporated with \$5,225 capital, to deal in grain, lumber, coal, feed, salt and farming implements by Scott Aitchison, James Burnett, Jr., and John Colgan.

A deed was filed in Marshall, Ill., recently by William Jack, trustee of the Bartlett Estate, transferring elevator properties in Illinois and Indiana valued at \$340,000 to the Indiana & Illinois Elevator Co., which, it is understood, is the new name

of the recently organized concern which succeeds the Bartlett-Kuhn Company.

M. R. Meents & Son have sold their elevator, lumber and grain business in Ashkum, Ill., to a farmers' elevator company for \$26,000. The business has been established for thirty-five years.

The Stonington Grain Co. of Stonington, Ill., has started the erection of its new elevator. The equipment includes an automatic scale, Western Pitless Sheller and Rolling Screen Cleaner.

The Farmers' Lumber & Grain Co. of Glasford, Ill., which was recently organized, has been incorporated with \$26,000 capital to deal in grain, lumber, coal, hardware, building materials, etc., by Henry C. Fuller, S. A. McQuown and Charles F. Black.

The Reliance Construction Co. of Indianapolis, Ind., which has charge of the improvement work on the elevator of George Couch & Sons, West Salem, Ill., has placed an order with the Union Iron Works of Decatur, Ill., for a Western Separate Warehouse Sheller.

Secretary S. W. Strong of the Illinois Grain Dealers' Association reports the following recent changes among grain dealers of Illinois: Philadelphia Farmers' Elevator Co. succeeds Collins & Savage, Philadelphia; Prather & Groves succeed Brainerd-Prather Grain Co., Williamsville; Kime & Gibson succeed A. S. Harshbarger, Girard; Munson & Andrews, Macomb; Neola Elevator Co. succeeds O. I. Richolson, Steward; F. J. Davis Grain Co., Inc., succeeds S. A. Hayward, Tremont; Lipp & Goodman succeed John Lipp, Bourbon; C. E. Fletcher succeeds Coon Bros., Royal; Franklin Grove Farmers' Elevator Co. succeeds George L. Carolus, Franklin Grove; Renkes Bros. succeed A. Renkes, Morrison; Peter Kruse succeeds Tom Abrams & Kruse, Ficklin; Savoy Grain & Coal Co. succeeds A. D. Ricketts & Co., Savoy; Elliott James succeeds Newman & James, Maroa; J. R. Aston & Son succeed J. R. Aston, Emden; Dryer & Burt succeed F. C. Edwards, Deers.

IOWA.

A grain elevator is being erected for John Barrett in Mitchellville, Iowa.

The new Farmers' Elevator in Akron, Iowa, commenced operations recently.

A Hall Signaling Distributor will be installed in O. Kaerberle's elevator in Newhall, Iowa.

Improvements have been made on the exterior of the Farmers' Elevator in Holland, Iowa.

Reuber & Bruce will erect an elevator, 34x36 feet, with capacity of 30,000 bushels, in Cushing, Iowa.

W. E. Reed of Wellsbury, Iowa, has purchased an elevator in West Bend, Iowa, and takes possession May 1.

J. A. Beatty of Delta, Iowa, is installing a Western Manlift, furnished by the Union Iron Works of Decatur, Ill.

W. H. Richard has sold his interest in the elevator at Ellsworth, Iowa, and will again make his home in Minnesota.

Joseph Schonborn has received part of the material for the new elevator to be erected in Centerdale, Cedar County, Iowa.

Farmers in the vicinity of Walford, Iowa, have decided to purchase an elevator in that place. About \$4,000 has been subscribed.

Martin Bros., who have been in the grain and feed business in Des Moines, Iowa, for the past eighteen years, will suspend operations May 1.

Farmers in the vicinity of Merrill, Iowa, have effected an organization for a farmers' elevator company. A constitution will be adopted at a future meeting.

A dividend of 5 per cent was declared while 20 per cent was put into a reserve fund at the recent annual meeting of the Farmers' Elevator Co. in Beaman, Iowa.

W. H. Pollock & Co. of Manning, Iowa, have purchased the M. Slife Elevator in Dedham, Iowa, and are now in possession. William Loeltz of Earling, Iowa, will have charge.

Peter Hoagland has sold his elevator and grain business in Cedar Falls, Iowa, to the New Hartford Grain Co. William Tostelebe, the manager, took possession April 1.

Farmers in the vicinity of Geneva, Iowa, have organized a co-operative elevator company, with D. H. Held, president. A committee has been appointed to solicit stock for the erection of an elevator.

The Farmers' Grain & Lumber Co. of Dows, Iowa, is now practically out of debt. At the recent annual meeting nearly \$4,000 of additional stock was subscribed. It is understood the concern plans to operate a general store.

Farmers in Grant Township, Iowa, have organized a farmers' elevator company, and will build a 25,000-bushel elevator in the new town of Craig, west of Struble, Iowa. The directors are Charles Pleuger, Onno Croon, John Johnson, A. P. Noble,

L. Winterfield, George Frerichs and Fred Grone-meyer.

The Santel & Tangeman Elevator at Danbury, Iowa, was purchased recently by Mr. Tangeman and J. C. Rhode, who later sold it to Mike Burke. The latter took charge April 1.

Farmers of the townships of Remsen, Henry, Union, Marion, Fredonia and Meadow, all in Iowa, met recently in Remsen, Iowa, to discuss the proposition of organizing a farmers' co-operative grain and live stock company, with headquarters in Remsen.

The Kanawha Farmers' Elevator of Kanawha, Iowa, will provide additional coal sheds, storage room for feed and more room for grain. A statement presented at the annual stockholders' meeting showed a gain in business of \$2,582.36 for six months.

The Whittemore Farmers' Elevator Co. has been organized at Whittemore, Iowa. It is understood that the two elevators at that place are for sale and one of them may be purchased. The capital will be \$7,500. M. Fandel was elected president and Tom Carmody, secretary.

WESTERN.

The capital stock of the Colorado Milling & Elevator Co. has been increased to \$2,500,000.

The Lawton Mill & Elevator Co. of Lawton, Okla., have had new track built to their milling plant.

The Canadian Mill & Elevator Co. have let a contract for the erection of a steam power plant in El Reno, Okla.

The Hobart Mill & Elevator Co. of Hobart, Okla., will install new scales and make extensive improvements on their plant.

The Eastern Montana Elevator Co. will commence at once the erection of a 50,000-bushel elevator in Glendive, Mont.

Construction work on the large grain elevators for the new milling concern in Salt Lake City, Utah, has been commenced.

The Farmers' Union at Mansfield, Ore., has decided to quit using sacks and will build an elevator of 100,000 bushels capacity.

The Russell-Miller Milling Co. has been granted a site for an elevator in Stipek, near Glendive, Mont., on the new Northern Pacific branch.

The \$65,000 reinforced concrete grain elevator of the F. C. Ayres Mercantile Co. in Denver, Colo., is nearing completion. Its capacity will be 200,000 bushels.

The Farmers' Co-Operative Grain Supply Co. of Fort Morgan, Colo., has been incorporated with \$50,000 capital by R. A. Chase, J. D. Brown and W. S. Simpson.

H. H. Minthorn of Bradley, S. D., has filed on a homestead north of Glasgow, Mont., and will build a grain elevator during the summer. C. F. Marshall of Glasgow will be associated with him.

A 1,000-barrel flour mill, with grain elevator, will be erected on the river front in Portland, Ore., by Balfour, Guthrie & Co. The mill and warehouse will be 300x100 feet and five stories high. The elevator will have a capacity of 4,000 bushels of wheat.

The recent sale of property in Salt Lake City, Utah, to J. K. Mullen, multi-millionaire grain dealer of Denver, Colo., is believed to be the first step toward the erection of a large grain elevator and flour mill in Salt Lake City. A company is being formed to take over the Intermountain Milling Co. and the new concern will be known as the Intermountain Milling & Elevator Co.

The plant of the Northland Milling Co. of Larimore, N. D., will be moved to Great Falls, Mont., and the concern will build a string of elevators in Montana for the purpose of handling the anticipated big wheat crops and providing the mill with material. A 60,000-bushel elevator and two warehouses will be erected in Great Falls. Elevators will be erected at once in Conrad, Teton County; Belt, Cascade County, and Chester.

The Harbor Board of San Francisco has directed that plans be prepared for the construction of 500 feet extension of the grain sheds on the water front westerly. This action is the result of a conference held last fall with the Merchants' Exchange, when it was agreed that it was necessary to enlarge the seawall and place the Belt railroad adjacent to the seawall sheds in order to permit the loading and unloading of grain at a minimum expense.

The 1,500-barrel flouring mill of the Wasco Warehouse & Milling Co. at The Dalles, Ore.; also the warehouse at that place, the electric power plant at White River, thirty miles south of The Dalles, and the warehouses along the line of the Columbia Southern in Sherman County, have been purchased by the Pacific Milling & Elevator Co. of Portland, Ore., for \$500,000. About four acres of river frontage in The Dalles were recently acquired by the Campbell-Sandford-Henley Co., which is

owned by the same interests that are back of the Pacific Milling & Elevator Co., for a concrete grain elevator with 500,000 bushels capacity and docks and warehouses to be built this summer.

A. J. Plant, grain buyer and warehouse proprietor, has acquired the large grain warehouses that have been conducted by Hillman & Grieve in Davis, Yolo County, Cal. The consideration was \$11,000. This deal gives Mr. Plant a monopoly of the warehouse business in Davis.

The capital stock of the Coeur d'Alene Grain & Milling Co. of Coeur d'Alene, Idaho, has been increased by \$10,000. A building 15x120 feet and three stories high will be erected. The concern has heretofore confined its efforts to selling grain and feed, but the purpose is to enlarge so as to include a flour mill.

W. O. Kay, L. W. Kay and W. H. Berrett, principal stockholders of the Cache Junction, Downey and Portage Elevator Companies, have filed petitions in the District Court at Ogden, Utah, for disincorporation of the three concerns. Petitioners assert that all affairs of the concerns have been closed and that there are no outstanding debts. It is said the purpose is to combine the three companies into the W. O. Kay Elevator Co.

MISSOURI, KANSAS AND NEBRASKA.

Construction work will be commenced at once on the new Horde Elevator in Bradshaw, Neb.

Peter Stepanek has purchased the elevator and mill at Friend, Neb., from the Friend Milling Co.

Farmers in the vicinity of Norcatur, Kan., are organizing a stock company to build a farmers' elevator.

The new 75,000-bushel brick elevator at the Arms & Kidder Mill in Kansas City, Mo., has been completed.

The Hudson Grain & Supply Co. of Hudson, Kan., will equip their elevator with a Hall Signaling Distributor and Omaha Buckets.

The Osmond Farmers' Grain & Live Stock Association of Osmond, Neb., have purchased the L. E. Mann Elevator at that place for \$5,000.

N. Vanier of Abilene, Kan., has purchased a controlling interest in the Phillipsburg Mill & Elevator Co., Phillipsburg, Kan., from W. H. Brandt.

Construction work on the elevator to replace the structure destroyed by fire at Rockford, Gage County, Neb., last winter has been commenced.

Fred K. Barrett has sold his grain elevator at Blue Rapids, Kan., to Messrs. Sam Laville and W. B. Huxtable of that place, who are now in charge.

The new Farmers' Elevator Co. of Burdett, Kan., has let the contract for a 15,000 bushel capacity elevator. The structure is to be completed by June 15.

The Mississippi Valley Elevator & Grain Co. of St. Louis, Mo., recently decided to issue \$100,000 in bonds for the enlargement of its business for the coming season.

Being unable to pay corporation taxes the stockholders of the Farmers' Elevator & Grain Co. of Kearney, Neb., have decided to sell the elevator. The concern has been improperly managed and has never paid dividends.

The board of directors of the Farmers' Grain & Live Stock Co., whose elevator was destroyed by fire recently at Oakland, Neb., has let the contract for a new 35,000-bushel structure of the "crib" variety, to cost \$4,500. The work is to be completed by May 30.

Farmers in the vicinity of Johnson, Neb., have organized the Johnson Grain & Live Stock Co., with \$8,000 capital. They have purchased the Coryell Elevator at that place and will soon be ready for operations. J. H. Pohlman is president and J. B. Liphardt, secretary.

Plans are making among banking and other interests of St. Joseph, Mo., for the organization of a company with a capitalization of \$500,000 to erect a 1,000,000 bushel public elevator in that city. It is the purpose to select a site on general railway terminal property and that railroad, banking and other commercial interests shall invest in the enterprise.

MINNESOTA AND WISCONSIN.

Andrew Melgaard has purchased the elevator in Warren, Minn.

The McCabe Elevator in Humboldt, Minn., is being thoroughly overhauled.

An automatic scales has been installed in the Farmers' Elevator in Kerkhoven, Minn.

The Independent Grain Co. of Foley, Minn., suspended operations for the season recently.

A. B. Anderson has purchased the elevator of the Bagley Elevator Co. in Hector, Minn., and will personally operate it.

The Waseca County Farmers' Elevator & Mercantile Association of Waseca, Minn., will receive bids this month for the removal of elevator, flour

house and coal sheds from present location to a new site, also for building foundation on a new site.

Work on the new \$10,000 elevator and warehouse for the American Society of Equity in Kaukauna, Wis., has commenced.

Alfred Johnson and son, George, farmers and stock buyers of Villard, Minn., have purchased the Peavey Elevator in that village.

It is reported that the firm of Larson & Swanson, grain dealers of Stockholm, Wis., will rebuild their elevator in Bay City, Wis.

The Redding Elevator Co. commenced operations in its elevator at Vinegar Hill, near Houston, Minn., recently, with J. G. Barron as buyer.

J. E. Arnold, for the past twelve years agent for the Cargill Elevator in Herman, Minn., has closed a deal for the purchase of the Northwestern Elevator at that place.

A new cement floor has been laid in the engine room of the Western Elevator Co. at Winona, Minn., and the walls of the office and engine room have been repaired.

George H. Matson, who has been manager of the W. W. Cargill Co. Elevator in Sherburn, Minn., for about thirty years, has purchased the structure and will remodel it.

Over \$35,000 has been subscribed to date toward the capital stock of the company that is being organized by the North Dakota Union of the American Society of Equity for the purpose of operating terminal elevators in Minneapolis and Duluth, Minn. When \$15,000 more shall have been subscribed the society will purchase terminal elevators.

The Montana & Dakota Grain Co. has been organized in Thief River Falls, Minn., by Louis Hanson, Math. Borgen, C. J. and D. N. Winton of Thief River Falls, and M. J. Dunn of Culbertson, Mont. The capital is \$50,000. The concern owns a line of elevators along the Great Northern Railway north of Thief River Falls, as well as several west on the Soo and Great Northern in adjoining states.

THE DAKOTAS.

A grain elevator is to be erected in Gascoyne, Bowman County, N. D.

Sentiment is being aroused for a farmers' elevator in Dell Rapids, S. D.

Tiedeman & Thies have purchased the Monarch Elevator in Verona, N. D.

Farmers in the vicinity of Elrod, Clark County, S. D., have organized an elevator company.

Farmers in the vicinity of Mt. Vernon, S. D., are planning to organize an elevator company.

The Western Elevator at Astoria, Deuel County, S. D., has suspended operations, but may reopen in the fall.

Frank Kohlhoff of Butler, S. D., has been looking for a site for an elevator along the St. Louis extension.

The Farmers' Elevator Co., whose plant in Barlow, N. D., was recently destroyed by fire, plans to rebuild.

Construction work has been commenced on the new elevator for Elmer Cows in Duxbury, Spink County, S. D.

Construction work will be commenced at once on the elevator for the Farmers' Elevator Co., in Armilla, N. D.

The Equity Elevator & Trading Co. of De Lamere, N. D., has been incorporated with \$15,000 capital by K. Martinson, F. A. Mund, G. H. Halmrast and others.

The Grand Rapids Farmers' Elevator Co. of Grand Rapids, N. D., has been incorporated with \$10,000 capital by R. E. Boise, J. McLeod and H. N. Femby.

The Odin Elevator in Portal, N. D., has suspended operations and Mr. Traver, the manager, is now in charge of the Farmers' Elevator in Lignite, Ward County, N. D.

The Farmers' Co-Operative Elevator Co. of Sables, N. D., has been incorporated with \$15,000 capital by E. H. Rosenberger, J. R. Hess, H. L. Hazlitt and others.

Farmers in the vicinity of Milnor, N. D., recently met and decided to incorporate a co-operative elevator company, to be known as the Equity Elevator & Trading Co.

The Independent Farmers' Grain Co. of Palermo, Montreille County, N. D., has been incorporated with \$25,000 capital by F. A. Wilson, J. P. Hanson, Harry Sylvester and others.

The Duluth Elevator Co., at Hannah, N. D., is now operating under the management of the Hannah Farmers' Co-operative Elevator Co., A. R. Balfour will continue in charge.

C. C. Dyball and George Cotton have purchased the Van Dusen Elevator in Volga, S. D., and will take charge July 1. Mr. Dyball has been manager of the Bingham Bros.' Elevator in Volga for the

last ten years, while Mr. Cotton has had charge of the Van Dusen Elevator for about a year.

The promoters of the new elevator for Leola, S. D., are meeting with success. The new structure will make the fifth elevator for Leola.

The Epping Farmers' Elevator Co. has been organized in Epping, Williams County, N. D. John Seaton is president and Tablo Coldvedt, secretary.

Sites for forty-seven elevators that will be erected in the several towns along the north and south branch of the Northern Pacific Railroad out of Mandan, N. D., have been laid out.

The Farmers' Elevator Co., which was recently organized in Sharon, N. D., has just closed a deal for the St. Anthony & Dakota Elevator at that place. The consideration was \$5,000.

Farmers in the vicinity of Pingree, N. D., have organized the Pingree Equity Elevator & Trading Co., and plans are being made for the erection of an elevator. L. A. Larson is president.

It is rumored that Mr. King, who owns the elevator and lumber yard in Running Water, S. D., has purchased the stock yards elevator formerly operated by the Avon Grain Co., Avon, S. D.

The Farmers' Elevator Co. of Andover, S. D., will soon commence the erection of an elevator with a capacity of 20,000 bushels. This with the present building will give a capacity of 60,000 bushels.

The new elevator company for Reeder, N. D., will soon be incorporated. H. O. Breckenridge has been elected president. A \$30,000-bushel capacity elevator will be erected, to be completed by July 1.

H. H. Rice of the American Society of Equity has been in Sterling, Burleigh County, N. D., soliciting subscriptions of stock for a farmers' elevator. He hopes to be able to commence building operations May 1.

A stock dividend of 10 per cent, amounting to \$2,250, was declared at the recent annual meeting of stockholders of the Farmers' Mill & Grain Co. in Milnor, N. D. Extensive improvements on the plant were made during the year.

The Eckelson Farmers' Elevator Co. of Eckelson, Barnes County, N. D., has been incorporated with \$40,000 capital by Martin Conlon, Fred Tabert and Charles A. Jones. The Andrews & Gage Elevator at that place has been purchased.

SOUTHERN AND SOUTHWESTERN.

The new elevator in Waco, Texas, is about completed.

N. S. McCrea will erect a feed and grain house in St. Petersburg, Fla.

The W. J. Savage Co. of Knoxville, Tenn., has purchased a Hall system for its elevator.

G. W. Cole, whose elevator in Snyder, Okla., was recently destroyed by fire, will rebuild on the old site.

A permit for the erection of a brick grain elevator in Houston, Texas, has been granted J. E. Ervine & Co.

The Brownsville Grain Co. of Brownsville, Texas, has filed with the Secretary of State proof of final payment of capital stock.

Perkins & Martin of Glasgow, Ky., have purchased a Western Mill Sheller from the Union Iron Works, Decatur, Ill.

The Miller Grain Co. of Orange, Texas, recently constructed an up to date warehouse on the Texas & New Orleans switch track.

The Coleman Mill & Elevator Co. of Coleman, Texas, are erecting a large elevator and also installing a new boiler and engine room.

The Knox County Elevator Co. of Munday, Texas, has been incorporated with \$10,000 capital by T. W. McGraw, C. L. Mayes and M. H. Lee.

The Knoxville City Mills at Knoxville, Tenn., owned by the J. Allen Smith Co., will erect an additional grain elevator to cost \$3,500.

Dolan & Sons of Pauls Valley, Okla., will remodel their elevator before harvest. They will install a feed mill and perhaps a cleaner.

S. T. Beveridge has awarded the contract for a grain elevator and storage house, 130x75 feet, in Richmond, Va. The cost will be \$18,000.

The Denison Mill & Grain Co. of Denison, Texas, has been incorporated with \$60,000 capital by W. L. Hutcheson, C. M. King and J. R. McDougall.

The Grady County Grain Co. of Minco, Okla., has been incorporated with \$8,000 capital by George W. Hogan, Nellie J. Hogan and J. D. Sanders.

The Chelsea Elevator & Storage Co. of Chelsea, Okla., have amended their articles of incorporation by decreasing the capital stock from \$7,000 to \$4,000.

The properties of the Werkheiser-Polk Mill & Elevator Co. of Temple, Texas, were sold recently under foreclosure proceedings at Belton, Texas, by the trustee for the creditors, the plant being bid

in by the First National Bank of Temple for \$20,000, about one-third the estimated value. The mill will be operated by a stock company.

E. R. Chastain of Norman, Okla., will remodel his elevator before harvest and install a new shell-er, cleaner and scales. The outside will be covered with galvanized steel.

The Mero Warehouse & Elevator Co. of Davidson County, Tenn., has been incorporated with \$25,000 capital by J. H. Hall, J. T. Howell, Henry Sperry, W. C. Collier and F. O. Watts.

William E. Reed, prominent grain dealer, has sold his property in Gaylord, Clarke County, Va., and will move to Charlestown, W. Va., to continue in the grain business with his son, E. B. Reed.

The Norman Mill & Elevator Co. of Norman, Okla., have let the contract for the 25,000-bushel elevator in Blanchard, Okla., to the McClean Construction Co. of Oklahoma City, Okla. The elevator will be modern in every respect.

A. G. Baker has sold his grain elevator in Summit Point, Jefferson County, W. Va., to his son, R. W. Baker, who, with M. B. Bane, has been operating it for the past two years. The consideration was \$3,000. Mr. Baker, Sr., has moved to Miami, Florida.

The Louisiana Milling Co. of Louisiana, Mo., will erect a reinforced concrete storage of 25,000 bushels, divided into eight bins. The Macdonald Engineering Co. of Chicago has the contract and will begin work at once. The building is to be erected in thirty days after commencing the work.

The Lexington Roller Mills Co. at Lexington, Ky., has decided to get in line for a concrete elevator in connection with its mill at Lexington, Ky. The engineering problems in this construction will be somewhat unusual, as the foundation will have to straddle a lively little stream that was in business many years before Lexington was and still occupies the old stand. A contract has been awarded the Macdonald Engineering Co., of Chicago for the erection of the building in reinforced concrete throughout. The building is to be started at once and a first class modern plant, fully equipped, with capacity of 100,000 bushels, will be ready for business along about the first of July.

EASTERN.

Edward H. Mason has purchased the grain store of George B. Farr & Son, Randolph, Vt.

The Federal Milling Co. of Lockport, N. Y., is being enlarged and a grain elevator is also being erected.

Bryant & Soule have acquired control of the grain and coal business of M. H. Cushing & Co., in Middleboro, Mass.

Final certificate of dissolution of the Colchester Grain & Coal Co., Colchester, New London County, Conn., has been filed.

The Chatham Grain Co. of Chatham, N. Y., has been incorporated with \$1,000 capital by Stephen J. Cox, S. S. Newton and A. C. McDonnell.

A site in North Tonawanda, N. Y., has been purchased by the Federal Milling Co. of Lockport, N. Y., and a grain elevator and flour mill will be erected in the near future.

The Baltimore & Ohio Railroad has bettered its elevator service by the erection of a fire-proof power house at Locust Point, Baltimore County, Md. This structure, with equipment, is built at a cost of \$90,000.

The Merchants' Consolidated Grain Co. has been organized in Kittery, Maine, to deal in grain, cereals, flour, etc., with \$1,000,000 capital stock, none of which is paid in. Horace Mitchell is president, and Hiram Thompson, treasurer.

OHIO, INDIANA AND MICHIGAN.

C. E. Carpenter of Schoolcraft, Mich., is installing a Western Sheller and Gyrating Cleaner.

O. W. Douglass of Shelby, Ohio, has let the contract for the erection of a new grain elevator in that city.

The Wright Milling Co. of Paris Crossing, Ind., will install a concrete and steel elevator of 20,000 to 25,000 bushels capacity.

J. Studebaker & Son, Bluffton, Ind., have placed their order through H. C. Teeter, Hagerstown, Ind., for a Western Pitless Sheller.

The Hoosier Grain Co. of Indianapolis, Ind., has been incorporated with \$5,000 capital by Cary Jackson, J. M. Brafford and P. G. Brafford.

The West Middletown Mill & Elevator Co. of West Middletown, Ind., has filed notice of increase of capital stock from \$5,000 to \$15,000.

W. H. Aiman of Pendleton, Ind., has placed his order for a Western Pitless Sheller and Gyrating Cleaner with the Union Iron Works, Decatur, Ill.

The Frankfort Grain Co. recently sold its elevator in Frankfort, Ind., to Edward Lee of that place for \$17,000. The latter has been in the grain business in Mellott, Ind., for nineteen years. He

purchased an elevator in Colfax recently and sold it the same week.

The big grain elevator in Bellecenter, Logan County, Ohio, was recently sold by Joseph Timmons to a syndicate of Ashland County men for \$10,000.

The Alma Grain & Lumber Co. of Alma, Mich., has succeeded to the grain, lumber and coal business of the Independent Elevator Co. in Ithaca, Mich.

The Farmers' Grain Co., which was recently incorporated in Boswell, Ind., has purchased the Frank Dunkle Elevator property at that place for \$17,000.

Lewis Lesh of Rockcreek Township, Wells County, Ind., has purchased the interest of O. L. Cupp in the elevator at Uniondale, Ind., and will assume management.

The Portland Milling Co. of Portland, Mich., has purchased the elevator and lumber yards of V. C. Allen in Portland. The elevator is the one rebuilt after the fire a year ago.

The Oaklawn Elevator Co., Oaklawn, Ind., is making extensive improvements in its elevator and has placed its order for machinery with the Union Iron Works, Decatur, Ill.

The Farmers' Grain & Milling Co. of Saint Henry, Ohio, has been incorporated with \$25,000 capital by G. F. Emerling, J. J. Moeller, H. A. Beckman, J. A. Schirack and Henry Wimmers.

Work has been commenced on the construction of the 40,000-bushel elevator for the Ohio Hay & Grain Commission Co. of Findlay, Ohio. The structure will be seventy-feet high.

The Windfall Grain Co., Windfall, Ind., has installed two 1,000-bushel capacity Western Separate Warehouse Shellers, both having extension frames and full-turn solid conveyor feeds.

Work has been commenced on the new elevator of Studebaker & Sons in Vera Cruz, Ind. A large warehouse is also being erected. Rapid progress is being made on the new \$5,000 elevator at Linn Grove, Ind.

The Bowden-Snyder Co. of Mansfield, Ohio, has been incorporated with \$15,000 capital, to deal in grain and farm implements by Sherman Bowden, M. A. Blackburn, E. E. Bowden, E. W. Snyder and S. F. Stutz.

Collins & Herran, who have been operating an elevator and live stock business in Markle, Ind., have dissolved partnership. Mr. Collins retains the elevator, while Mr. Herran will continue in the live stock business.

The Detjen-Kattman Co. of New Knoxville, Ohio, has placed its order with the Union Iron Works of Decatur, Ill., for the entire machinery equipment for its new elevator, including a Western Pitless Sheller and Gyrating Cleaner.

The Canton Feed & Milling Co. of Canton, Ohio, plans to make that city a grain center by taking over the Canton City Mills, owned by Hiram Shaup, and also the Canton Feed Co. Warehouses will be built in Brewster and Orrville.

The Plymouth Grain Co. of Plymouth, Ind., has sold its elevator and business to Thomas Tribbey and Charles Mullenhour, and F. P. McFadden has sold his elevator and business to E. W. Ball and F. K. Bankert of Rushville, Ind., for \$9,000.

The Gottron Bros. Co. of Fremont, Ohio, has been incorporated with \$50,000 capital and will take over the grain elevator, quarry, lime plant and other business conducted by Gottron Bros. at that place for the past thirty-five years.

The Macdonald Engineering Co. of Chicago has been awarded the contract for erecting a reinforced concrete storage for the Northwestern Elevator & Mill Co. at Loudonville, Ohio. The building will have a net storage of 60,000 bushels and be equipped with machinery for handling the grain from and to the present plant. The building is to be entirely fireproof and to be ready for operation by July the first.

CANADIAN.

Richardson & Sons have reopened their elevator in Bethune, Sask.

The new National Elevator in Port Arthur, Ont., commenced operations recently.

The Hall Milling Co., of Lumsden, Sask., will erect an elevator in Craik, Sask.

M. Gascho has succeeded to the grain business of Samuel Rennie in Zurich, Ont.

The Ogilvie Flour Mills Co., Ltd., is razing the old elevator alongside the oatmeal mill in Winnipeg, Man.

The Saskatchewan Elevator Co. of Winnipeg has purchased the lumber business of George Riddell in Carlyle, Sask.

The capacity of the Globe Elevator in Calgary, Alta., will be increased from 500,000 bushels to 1,000,000 bushels.

The Alberta Pacific Elevator Co. will move its elevator from Chigwell, Alta., to Clyve, Alta., and will build an elevator in Tees, Alta. It will also

erect elevators in Maple Creek, Walsh and other points in Western Saskatchewan.

Bannerman & Horne, feed and grain dealers of Victoria, B. C., have admitted a partner.

The Farmers' Trading & Elevator Co., of Craik, Sask., have advertised for bids for the erection of a 60,000-bushel elevator, equipment, etc.

James Stewart & Co., Chicago, have finished plans for a 500,000-bushel grain elevator to be erected in Goderich, Ont., for the Western Canada Flour Mills Co., Ltd., of Toronto, Ont.

The new elevator of the Grand Trunk Pacific Railway in Fort Williams, Ont., was opened for operations recently. It has a capacity of 3,000,000 bushels. It is absolutely fire-proof.

The Western Farmers' Elevator & Milling Co. has been organized at Lethbridge, Alta., and will erect a number of elevators and a mill. An elevator and mill are now under construction in Bow Island, Alta.

The Parkin Elevator Co. of Hespeler, Ont., is to be liquidated under a winding up order granted by the Court in Toronto on petition of N. A. Kribs, a creditor, for \$868. The concern is indebted to the Merchants Bank of Toronto for over \$30,000, and the town of Hespeler holds a mortgage on the plant for about \$14,000. The concern's nominal stock is \$48,000, of which it is said a large proportion was issued at discount.

Negotiations are on between the Grand Trunk Railway and the Canadian Government for the former to use the new elevator recently erected by the Government in Port Colborne, Ont., instead of the old elevator the Grand Trunk has operated for years. If this is agreed upon boats will be able to carry from 10,000 to 15,000 additional bushels of grain, lightering at Port Colborne and returning to Port Dalhousie with despatch on account of the capacity and facilities of the elevator at Port Colborne. A third pier will be built at Port Colborne near the Government elevator, which will make an additional 200-foot slip for vessels.

The Harbor Commissioners at Montreal, Que., have induced the Government to advance an additional \$6,000,000 to defray the cost of proposed extensive harbor improvements for the next three years. The loan is to be secured by bonds of the Harbor Commission, repayable in twenty-five years with interest payable semi-annually at 3½ per cent a year. A grain elevator of 2,000,000 bushels capacity will be erected, and in order to make the harbor of a uniform height from the Lachine Canal to the C. P. R. elevator, the Victoria pier will be raised from its present level to that of the Western piers. The purpose is to make Montreal the principal ocean port on the Atlantic seaboard.

[For the "American Elevator and Grain Trade."]

GRAIN NEWS FROM ALBERTA.

BY D. O. McHUGH.

The Calgary Grain Exchange has moved into its new quarters in the Grain Exchange Building. This building is a six story building built of reinforced concrete, and is owned by W. R. Hull. The Grain Exchange has a lease of three floors for the use of the grain firms and the Exchange. The Exchange has lately purchased four lots on Sixth Avenue and will erect a building of its own before the present lease runs out. The membership of the Exchange is growing gradually and now numbers nearly ninety. There is as yet no option trading but a daily session of a half hour has been inaugurated for cash transactions.

This has been an unusually early year and most of the spring wheat has been sown. The winter wheat all looks good and the spring wheat is doing nicely, though there is need for rain.

Alberta is filling up very rapidly this year, a great many settlers coming from "The States."

The milling interests report that business, which has been quiet the past two weeks, is on the mend and several export orders have been booked this week.

The new mill of Bullock & Caldwell at Stettler, which has just been started, reports business good.

The Globe Elevator, Calgary's first terminal elevator, which was built last fall with a capacity of 500,000 bushels, will be increased to 1,000,000 this year.

A new mill is being built at Bow Island by the Western Farmers' Mill and Elevator Co. of Lethbridge.

There will be a new cereal mill built at Calgary this year by the Midlothian Milling Co., who intend, we understand, to manufacture mostly for export.

There has been very little grain movement the past two weeks as the farmers have been busy seeding, but considerable wheat has gone west to Vancouver for export to Mexico.

D. M. Gordon of Abilene, has been appointed Chief Grain Inspector, Kansas, to succeed John T. White, resigned.

[For the "American Elevator and Grain Trade."]
ST. LOUIS GRAIN AND FLOUR NOTES.

BY. L. C. BREED.

The directors of the St. Louis Merchants' Exchange are endeavoring to induce the post office authorities to install a pneumatic tube between the Main Post Office or Eads Bridge Substation and the Merchants' Exchange Station as such service would save an hour in delivering mail to the Exchange.

Since the tax was passed, Exchange members have been paying the state transactions tax under protest, receiving receipts for the amounts paid. Secretary Morgan of the St. Louis Merchants' Exchange has collected \$11,877, and the collections in Kansas City, St. Joseph and other cities amount to about \$100,000. This amount will be turned over to the revenue fund and the 25-cent tax will be paid without protest from this time on. The \$11,877 collected by Secretary Morgan represents only a small portion of the transactions on the St. Louis Exchange. The reason for this is that the traders deny the right of the state to tax trades which they "ring out," and assert that the tax can be applied only to transactions in which grain actually changes hands.

As a result of the decision recently rendered by the Supreme Court of Missouri, traders in futures have lost their case in the contention that the law which imposed the tax was not valid. The Court says in its opinion: "Manifestly the act does not provide a direct, or property, tax in any form whatever, but simply provides for an excise, or stamp, tax on the right, privilege and occupation of buying or selling shares of stocks or bonds of any corporation, or petroleum, cotton, grain, provisions or other commodities, either on margins or otherwise, where the same is not at the time actually paid for and delivered."

The Exchange was represented by R. F. Walker, their attorney. The attorneys pleaded against the tax that it was a revenue tax improperly assessed and therefore invalid. No stamps for future use have been received, but Secretary Morgan will continue receiving the deposit of the tax until definite arrangements for collecting the tax have been made by the State Auditor.

St. Patrick's Day was observed on 'Change to the extent of a "special dispensation" abrogating the rule against smoking on the floor as in case of election day and holidays.

According to the State Labor Bureau's estimates, the live stock interest of Missouri for the present year is worth the enormous sum of \$320,344,928. It includes horses, cattle, mules, sheep and hogs. In the opinion of the Bureau only about one-half of the surplus stock was sold last year. The total number of head of stock is placed at 10,072,999.

The St. Louis Brokerage Company, with offices at Third and Pine Streets, has gone out of business and will liquidate its accounts. Thomas Sullivan, manager, is in charge of the liquidation. The reason given for the suspension of business is that R. H. Price, reputed owner of the concern, is ill and wishes to avoid worry of any further business.

A warning to farmers to be sure of the soundness of the corn used as seed this year has been issued by the grain committee of the Exchange. The committee directed attention to the many recent reports touching the low vitality of the corn crop of last year, and advised farmers to send samples of the corn they propose to use to the State Agricultural College to be tested.

The Board of Directors has ordered a vote of the members to be taken April 15th on an amendment to the rules increasing the commission to members fifty per cent, making it $\frac{1}{2}$ c on wheat, rye or barley and $\frac{3}{4}$ c per bushel on corn and oats.

H. F. Langenberg has been appointed a member of the honorary membership committee in place of the late John Wahl.

On recommendation, of the market reports committee, the Exchange decided to send a daily market report to the Omaha Grain Exchange.

It is proposed that the Merchants' Exchange, now that the U. S. Government has given up its grain testing station here, shall maintain a laboratory for the purpose of testing corn, flour, etc., for a nominal charge. As an inducement to secure for the members consignments of grain, it is proposed to extend the privilege of the laboratory to country shippers of corn. The flour test, such as is carried on at large mills, will be valuable to country millers who, as a rule, are without the proper facilities for conducting tests of their flour and this would be done for them for a small fee, the charges being merely to cover the cost of maintaining the laboratory.

Great preparations are being made not only by the officers of the Farmers' Educational and Co-operative Union, but these are being seconded by the officers of the Merchants' Exchange and the Business Men's League to make a big success of the coming convention of the Union to be held in St. Louis May 2-8. The presence of President Taft and Gov. Hadley will be the drawing cards, since they will make addresses during the sessions.

It is expected that there will be a large attendance, as 14,500 local members of the Union have

reported they will send delegates. Five railroads have announced they would grant reduced rates. President M. W. Cochrane of the Merchants' Exchange states that an invitation has been sent to all the grain exchanges in the Council of North American Grain Exchanges to send delegates to the convention.

The letter of invitation states that it is understood this is a meeting to harmonize so far as possible all discordant agitation, and that it is felt that it is important to become posted on the demands of the agricultural organizations which are now more antagonistic than friendly to the grain exchanges, and that this will be a rare opportunity to get their leaders and the exchanges in accord, thus preventing resolutions or other action detrimental to boards of trade.

The Union is composed of farmers and owns and controls 5,100 warehouses and elevators in various parts of the United States. It also operates packing houses and canning factories. Twelve agricultural colleges are maintained by the Union. During the convention plans will be launched for securing the permanent headquarters of the Union and the National Agricultural University for St. Louis.

The war against bucket shops is being vigorously waged. The cases of Charles B. Lightner and Geo. L. Harris, charged with setting up a bucket shop, are being tried in Judge Hitchcock's court. John Ryan, secretary, and Patrick A. Stephens, clerk of the Merchants' Stock & Grain Company, have been arrested. The charge against Ryan is perjury and that against Stephens is setting up a bucket shop.

Charles R. Drummond has been summoned as a witness by Asst. Circuit Atty. Newton, who has several cases pending in courts against bucket shops. Drummond was found to be a patron of the bucket shops and is one of fifteen witnesses summoned for the purpose of learning additional details concerning other shops against which cases have not yet been filed.

Louis A. Cella, millionaire real estate man of this city, who is one of twenty-nine alleged illegal grain operators against whom the Federal Grand Jury of the District of Columbia has returned indictments, denies having any connection with bucket shops and has been released on bond.

St. Louis bucket shop interests, and those in other large cities, are planning either to be allowed to do business themselves, or put the regular exchanges out of commission as well. A fund is being raised to make a vigorous fight for existence, which is to be country-wide. Headquarters of the campaign, it is said, will be in St. Louis. Attorneys for the bucket-shoppers, it is stated, have discovered a law in the Missouri statutes, which has long been unenforced, forbidding trading in grain or other futures. Under this statute, they claim, the Merchants' Exchange can be attacked and its members who deal in options indicted and punished and finally driven out of business. Similar obsolete laws, it is said, have been discovered in other States.

An alternative plan is that of the formation of an "open board of trade," on which dealing in various commodities, will be in order. Membership in this will be easy of access and with a well-drawn charter its members will be able to receive and execute orders. It might be advisable for these enterprising parties to learn the fate of Christy's Kansas City (Kan.) "Board of Trade."

The Merchants' Exchange has, it is claimed, given its official sanction to curb trading, although it is not allowed under the rules. The "curb" is in future to be held in room 201 of the Exchange building and Edward Loesch has been appointed to act as doorkeeper. It was formerly held in the corridor of the building, which was considered both too noisy and too public. This new departure is being made the subject of discussion and is not approved of by some of the members. The construction placed on the rule is that dealing in privileges was not included in the prohibition covered by it.

The declaring of the law on dockage valid will have no bearing whatever on weights as rendered in the St. Louis market, as the Merchants' Exchange, through its department of weights, forbids dockage or deduction of any amount, and has done so for a number of years. It applies only to the Kansas City dockage practice.

The Illinois Grain Elevator Company of St. Louis has been incorporated. Capital stock \$10,000. Incorporators, R. J. Pendleton, J. M. Pendleton, L. A. Cash and others.

The National Feed Company of St. Louis has been incorporated. Capital stock \$10,000, fully paid. Incorporators, Abe Cohn, Morris Schwartz and Henry A. Adam. To do a general feed business. The company will occupy office 420 Exchange building.

The F. J. Davis Grain Company of Fremont, Ill., has been incorporated. Capital \$15,000. Incorporators, Frank J. Davis, Ura S. Davis and August Schneider; to do a general grain business.

Dickson Cunningham, for many years identified with the grain business in St. Louis, was found asphyxiated in his home March 10th. He was 71 years old.

Correspondence solicited on grain trade matters.

[For the "American Elevator and Grain Trade."]
THE GRAIN NEWS OF OHIO.

BY E. F. BAKER.

Opinions are somewhat conflicting as to the actual condition of growing wheat in Ohio. The dry weather of the past month seemed to show an unwholesome effect upon the plant, and there was considerable discouragement among growers; but recent warm rains have made a big improvement, and while it is still early to determine, the consensus of opinion is that it will come through in good shape. At least, there are but few unfavorable reports coming in at the present time, and all seem to feel that the chances have enhanced wonderfully within the past week or two.

A very fair trade has been carried on despite the light operations of the mills of the Toledo district, which have found flour business extremely dull. The local supply of wheat has been reduced somewhat, approximating 427,000 bushels at this time. Receipts for the past week have been 25,000 bus., with shipments of 24,150 bus. No export trade has been possible. Most of the mills are finding plenty of wheat in their own immediate vicinities to meet their limited needs, farmers being disposed to sell a little more liberally in view of the prospect of the new wheat crop.

While the quality of corn coming into this market was somewhat improved over that of a few weeks ago, it is not at all satisfactory at this time. This is accounted for by the action of grain shippers who have been mixing burnt and moldy corn from the center of cribs with high grade corn, in an evident attempt to get rid of all corn on hand at the same time. The result has been to cut down grades here and create general dissatisfaction. Out of 101 cars which came in during the past week but three cars graded No. 2, 60 cars graded No. 3, 21 cars No. 4 and 17 cars sample. Much of this corn would easily have graded No. 2 had it not been mixed with inferior stuff. The market is fairly active, however, 103,600 bushels coming in during the past week, with shipments of 77,400 bushels, mostly going to the Eastern markets. The available supply here is now estimated at about 270,000 bushels.

Receipts and shipments of oats during the past week have been just about a standoff at 28,000 bus. Reports from country points say there is still a fair percentage of the last crop in first hands. Farmers are selling a little more liberally than they did some time ago, and country elevators are moving some of their stocks. Quality has been entirely satisfactory, and there has been a good Eastern demand for all that has come in. Many farmers are now sowing their oats and it is estimated that the acreage will be at least normal.

March shipments of clover seed from Toledo amounted to 28,500 bags, as against 23,400 last year, 11,500 two years ago, 19,000 three years ago, and 18,900 four years ago. It is expected that April will fall far below these figures.

Fred Mayer of the J. F. Zahm company has returned from a week's sojourn at French Lick Springs.

W. H. Haskell of the Haskell Grain Company, has returned from a trip to Omaha and other Western points.

The Produce Exchange, the local stock exchange and all brokerage houses in Toledo closed in observance of Good Friday.

The Cravis-Emmick Elevator at Hamler was recently fired by sparks from a passing engine and sustained a loss estimated at \$12,000.

Mark N. Mennel left this week for a trip to Argentina. He will return some time in May. He is treasurer of the Isaac Harter Milling Company.

The Ohio Hay and Grain Commission Company will erect a large modern grain elevator at Findlay, Ohio. Work on the structure has already begun.

W. A. Dull, of Willshire, and J. Wolfe, of Lindsey, were recent visitors in Toledo. They report promising conditions at home so far as crop prospects are concerned.

The steamer Parks Foster, which has been afloat all winter with a cargo of 104,000 bushels of wheat, recently unloaded its burden at the National Milling Company's plant.

Fire destroyed the flour and feed mill of Frank Ridgeway, at New Philadelphia, recently. The plant was entirely destroyed entailing a loss of about \$12,000, covered by \$2,000 insurance.

E. W. Wagner, of Chicago, has leased offices on the fourth floor of the Produce Exchange building and will open a Toledo office. George W. Shepard, formerly of Milwaukee will be in charge.

The Gardner Grain and Milling Company plant at Colby, O., was recently burned, as the result of the explosion of a gasoline tank. Considerable grain was also consumed. The loss is estimated at \$4,500.

C. S. Coup, of the Northwestern Milling Company has returned from an extensive trip to Loudonville, Mt. Vernon, and other central Ohio points. He says, "Wheat in central Ohio has been growing so lustily farmers think the plant has advanced

too far. Fears are felt that the stalks may joint out before the frosts are over."

Loring J. Smith, former manager and secretary of the Ohio Milling and Elevator Company at Marion, Ohio, was recently found guilty of embezzlement. Shortages are said to be over \$12,000.

The E. E. Evans Company, dealers in hay, grain and seeds, has leased the Quail Warehouse in Toledo. The office force will be removed from Tiffin, Ohio, to Toledo, which will be made headquarters.

The Lappe Grain Company, which for the past couple of years has conducted a commission business, has closed its offices in the Spitzer building, and will turn local affairs over to the main office at Pittsburg.

Mrs. D. W. Jay, wife of the president of the Jay Grain Company, at St. Marys, O., died recently from a complication of troubles. She was 63 years of age and leaves beside the husband, two sons and one daughter.

John F. Batzold, for many years miller at the plant of the National Milling company, died at his home in Toledo, recently. He was 67 years old and leaves a wife. The body was taken to Adrian, Mich., for interment.

Miss Kate King, daughter of Frank I. King, will play an important part in the "Toy Ballet," a feature of the Society Vaudeville which will be put on at the Valentine Theater, on April 22 and 23 for the benefit of the Newsboys' association.

The Globe Flour Mills at Norwalk, O., recently burned to the ground, entailing a loss estimated at \$40,000 partly covered by insurance. The plant was owned by the Theodore Williams estate and leased by the W. H. Gardner Flour and Mill Company.

A. E. Royce, a recent visitor on 'Change, says there is no question that the Wood County wheat crop was badly used by the elements last winter. Winter kill is apparent in many fields, and a number of them will be abandoned and other crops planted.

One of the finest cars of corn which has come into Toledo for a long time was brought in by the Paddock-Hodge Company this week, from southern Illinois. Moisture test showed a trifle over 13. It will be sold for seed and brought a premium of about seven cents.

C. F. Barnhouse of Upper Sandusky, was a recent Toledo visitor. "Wheat is holding its own in Wyandotte county," said he. "The plant does not seem to be growing very fast, but the situation is by no means discouraging. Farmers are seeding a big acreage of oats."

The home of President Edwin L. Camp of the Toledo Produce Exchange was recently burglarized, and jewelry and money estimated of the value of about \$2,000 stolen. Suspicion points to a domestic who disappeared simultaneously with the valuables. She has not since been located.

The grain elevator and other business, which for the past thirty-five years has been operated by Gottron Bros., at Fremont, Ohio, has been taken over by a newly incorporated company to be known as the Gottron Bros. Company. The concern has an authorized capital stock of \$50,000.

C. C. Greenleaf, an extensive mill owner and banker at Wauseon, died this week at his home in that city, from pleuro-pneumonia. He had been in poor health for many months. He leaves a wife, one son and a daughter. He was 71 years old. The deceased also owned a large mill at Ligonier, Ind.

H. T. Faust and Thomas J. Kemp, Chicago; Frank Strange, Frankfort, Ind.; F. M. Cole, Buffalo; C. G. Mannen, Elkhart, Ind.; W. L. Dean, Marion, Kansas; A. N. Wertheimer, Ligonier, Ind.; and Charles A. Tupper, Churchville, N. Y., were recent visitors at the Toledo Produce Exchange.

Toledo, O., April 9.

The salvage grain from the mill fire at New Ulm, Minn., is being sacked to go to New England for poultry feed. The grain is being handled by the Brooks Elevator Co.

In view of the uncertain condition of wheat early in March, certain Kansas farmers proposed reseeding their land to oats, and asked a local milling company whether it could use a mixture of wheat and oats should it grow. So an arrangement was made by which the mill men will clean and separate all such grain for the farmers at cost.



BEARS MAY NEED THEM.—Zahm's Red Letter.

THE EXCHANGES

The Wichita Board of Trade is asking its landlord to enlarge its quarters by 50 per cent.

The Sioux City Board of Trade has bought a moisture tester for use in the inspection department.

Geo. A. Schroeder has been reappointed manager of the freight bureau of the Milwaukee Chamber of Commerce.

John F. Rae of Lincoln, Neb., has been expelled from the Chicago Board of Trade. He was charged with trading for bucket-shops.

The differences as to conditions of telegraph service from the floor of the Winnipeg Grain Exchange having been adjusted, the service was resumed on March 30.

The Minneapolis Chamber of Commerce has renewed for 1910 its prize of 1909 of \$250 to be awarded at the North Dakota State Fair for best samples of Fife and blue stem wheat grown in that state.

The Board of Trade of Jacksonville, Fla., has purchased moisture testers for use by the hay and grain inspection committee. John K. Williams will have charge of the testing department. J. C. Darby is chairman of the committee.

The Twenty-seventh Annual Report of the New Orleans Board of Trade, Ltd., has appeared, compiled by Sec'y H. S. Herring. The Report reviews all the numerous activities of the Board, and contains the usual statistics of the port.

All treasury memberships in the Wichita Board of Trade having been exhausted, admission can now be had only by purchase. A change of this sort was made when H. S. Nickel was made manager of the Board of Trade Clearing House Association; his seat being purchased by G. S. Barnes of Duluth.

The "Annual Statement of the Trade and Commerce of St. Louis for the Year 1909 as reported to the St. Louis Merchants' Exchange by Geo. H. Morgan, Sec'y," has been published. The "Statement" is a review of all the business of St. Louis, and not of the grain trade only, which is of course included in the Statement.

The premium paid for choice of telephones on the floor, Chicago Board of Trade, which were sold at auction on March 24, was only \$100 against \$600 a year ago. Only eight telephones brought this premium, the balance going at \$5 premium each. Total premiums aggregated \$1,050, against \$3,000 last year. In addition to the premiums each telephone pays an annual rental of \$250.

The Louisville Board of Trade has announced the following standing committee on grain for the year: H. H. Bingham, of Bingham-Hewett, chairman; Alfred Brandeis, of A. Brandeis & Son; F. N. Hartwell, of H. Verhoeff & Co.; Andrew Edinger, of Edinger Bros.; A. C. Schuff, Henry Fruechtentich, John Raidt, Charles T. Ballard, of Ballard & Co.; W. M. Atkinson, of Washburn-Crosby; F. C. Dickson, of the Kentucky Public Elevator Co.; C. M. Bullitt, Thomas C. Williams, of S. Zorn & Co., and R. L. Callahan.

CORNERS DISCOURAGED.

The director of the Chicago Board of Trade on March 18 adopted the following resolution:

"Resolved, That it is the sense of this directory that manipulation of the price of any of the commodities dealt in our exchange or forestalling the price of or cornering any of said commodities will be considered a grave offense and that the rules relating to such offenses will be enforced."

NEW RULES OF THE STOCK EXCHANGE.

The governing committee of the New York Stock Exchange on March 30 adopted certain reform rules to cover the carrying of speculative accounts for employees or brokers, making the prohibition which already applied to such cases extend to employees of banking institutions or insurance companies. It is made obligatory for a buyer or seller of big blocks of stock to take care of all smaller lots in the regular unit of one hundred shares, or the multiples, at the price bid or offered; and finally there is put into concrete form a now unwritten law prohibiting "specialists" from taking advantage of their position by buying or selling for their own account or interest securities for which they have orders to buy or sell.

REINSPECTION AT MINNEAPOLIS.

The Minneapolis Chamber of Commerce has amended its reinspection rule to read as follows: "Sec. 5.—On all sales of corn graded No. 4, No. 4 Yellow, and No Grade, on account of dampness, the buyer must accept or reject said corn so purchased, or notify seller of his desire to call reinspection, by 11 o'clock a. m., of the business day next succeeding the day of purchase; providing it has been possible for the buyer's sampler to sample such corn within Minneapolis switching limits by that time. If it be impossible for buyer's sampler to sample such corn within the time specified, it shall be the duty of the purchaser to notify the

seller by 11 o'clock of the business day next succeeding the day of purchase, and such corn shall be sampled as soon as possible thereafter by the buyer's sampler, and the purchaser must accept or reject such corn, or notify seller of his desire to call reinspection immediately after the report of the buyer's sampler is made. When because of heavy loading or for any other reason cars are sampled or inspected 'subject to approval,' this section is not operative."

MILWAUKEE ELECTION.

The annual election of officers of the Milwaukee Chamber of Commerce, so far as president was concerned, was exceedingly spirited. E. J. Furlong and B. C. Ellsworth were the candidates; and at the election of April 4 the balloting resulted in a tie, each receiving 155 votes. Another ballot was then ordered for April 6, when Mr. Furlong was elected by a vote of 163 to 157 for Mr. Ellsworth, a majority of 6. The other officers, elected on April 4, are as follows:

First Vice-President—W. P. Bishop.
Second Vice-President—James A. Mander.
Secretary-Treasurer—H. A. Plumb.
Directors (three years)—Clark Fagg, G. C. Holstein, James F. Howard.

Members of the Board of Arbitration—A. L. Johnstone, H. M. Stratton, Louis L. Runkle, Irving C. Lyman, Andrew O. Lowry.

Members of Board of Appeals—J. J. Crandall, John V. Lauer, Andrew A. McCabe, Charles R. Lull and Henry Wissbeck.

GRAIN TRADE AT LITTLE ROCK.

In accordance with a resolution adopted at a meeting of the grain committee of the Little Rock Board of Trade, a "call" was established at that market on March last. The rules governing the operation of the "call" provide that each transaction shall be in the article dealt in and that the seller must deliver the commodity sold or show evidence of its existence. Another rule provides that no futures shall be dealt in. The call list includes corn of all grades, oats of all grades, hay and cotton seed products.

The same committee has under advisement the holding of a state grain dealers' convention.

A resolution also was adopted that it is "the sense of the committee that as far as possible all purchases be subject to local inspection and that preference be given to those who are willing to offer it." [The maximum moisture content of 3 corn is 19 per cent.]

CHANGES AN EXCHANGE MEMBERSHIP.

Chicago.—Sec'y Stone reports the following change in membership of the Chicago Board of Trade during March: New members—Arthur R. Chanaut, Wm. H. Dickinson, Geo. E. Gano, Arthur Dyer, Solomon C. Keckler, F. J. Levering. Withdrawals—Moses Simons, Est. of F. E. Dickinson, Fay W. Thomas, Theo. Schwarz, M. L. Williams, Geo. A. Howell.

Cincinnati.—Supt. C. B. Murray reports the following members elected to the Cincinnati Chamber of Commerce on April 5: Hugo O. Wentz, Vulcan Copper Works, Distillery Furnishers, 120 Sycamore St.; Frederick B. Edmonds, Treasurer and General Manager, Cincinnati Union Stock Yards; William Lewis, Flour Miller, Miami, Ohio; George Hafer, retired capitalist, 31 St. Paul Building; John H. Finn, with Wm. C. Biles & Co., whisky commission, 313 Vine St.; Louis C. Evers, feed and coal, Glenway and Beech Aves.

Detroit.—Sec'y F. W. Waring reports the following changes in membership of the Detroit Board of Trade: New members—C. R. Huston, C. E. Oliver; resigned—C. Carvil, H. A. Sanhoff.

Indianapolis.—The Secretary of the Board of Trade reports that the Hoosier Grain Co. has been admitted to membership.

Milwaukee.—Sec'y H. A. Plumb reports the following changes in the membership of the Milwaukee Chamber of Commerce: New members—John C. Penhorn, Louis Portz, H. J. Droeger, H. L. Hankinson, L. G. Marstin, Aug. Debhan; membership transferred—L. W. Falk, deceased, R. M. Labarthe, J. W. Bass, L. Everingham, deceased.

San Francisco.—Sec'y T. C. Friedlander reports the following admitted to membership in the San Francisco Merchants' Exchange in February: C. A. Carlisle, of Carlisle, Keim & Co., to succeed Wm. C. Keim; Frank P. Doe, of Frank P. Doe Company, to succeed Ira J. Harmon; C. W. Cook, with American-Hawaiian S. S. Co., to succeed F. C. Schernstein. The following were admitted in March: Lawrence J. Waterman; Emil Waterman to succeed R. D. Hume, deceased; H. O. Beatty with Pacific Shipping Co., to succeed Fred Dorr; Jas. H. Bishop with Steiger Terra Cotta and Pottery Works, to succeed T. B. Bishop, deceased.

St. Louis.—Sec'y Geo. H. Morgan reports the following changes in the membership of the St. Louis Merchants' Exchange: New Members—T. C. Huusey, of Adams Mill & Elevator Co., Carrollton, Ill.; John Fitzgerald, superintendent terminals, L. & N. R. St. Louis; C. O. Sommer, of Sommer & Albrecht, commission merchants, St. Louis; Louis

H. Landers, with H. & L. Chase Bag Co., St. Louis; and E. H. Slater, grain, St. Louis. The above were transferred from Jos. Dodson, J. M. Chandler, Henry Goldsmith and Jesse H. Holmes.

PHILADELPHIA COMMISSION RULE.

Following is the Philadelphia commission and brokerage rule as adopted July 29th, 1909, and amended March 28th, 1910:

Section 1. The following rates of commission . . . are established as the minimum charges which shall be made for the transaction of the business hereinafter specified by the members of this Association for receiving, selling and accounting for: Wheat, 1c. per bu.; corn for export, $\frac{1}{2}$ c. domestic, 1c.; oats for export, $\frac{1}{2}$ c. domestic, $\frac{3}{4}$ c.; rye, 1c.; barley for export, $\frac{1}{2}$ c., domestic, 1c.; ear corn, $\frac{1}{2}$ c.; bran, shorts, chops, mixed or mill feed, 50c. per ton in carload lots; clover, timothy and other seeds, 2 per cent.

"Section 2. In addition to the foregoing specified rates of commission, there shall be charged the legal rate of interest on all advances, inspection, insurance, and other charges which may be incurred.

"Section 3. Any grain, feed, seeds, or similar merchandise, that has been shipped to this market, or to any diverting point representing this market, and sold by any member of this Exchange after shipment, shall be considered as a consignment and subject to the charges enumerated in these rules.

"Section 4. No rebate, drawback, brokerage or allowance of any kind shall be made, directly or indirectly, nor through any other party or parties.

"Section 5. For brokerage the minimum rates shall be: One-eighth of one cent per bushel on all grain; excepting ear corn, on which the charges shall be one-quarter of a cent per bushel; and on all feeds ten cents per ton.

"Section 6. Nothing in these rules shall be construed to prevent any higher rates of commission or brokerage being charged by special agreement.

"Section 7. If any member of this Exchange be accused of violating these commission rules, and be found guilty by the Board of Directors of violating any of the provisions or requirements thereof, he shall be fined not exceeding five hundred dollars for each offense, and until such fine be paid shall be denied the privilege of the floor."

PITTSBURG GRAIN AND FLOUR EXCHANGE.

The Pittsburg Grain and Flour Exchange has removed from the Pennsylvania Railroad Building, which has been its home for many years, to the Wabash Terminal Building. The new quarters were opened on March 31. More than 500 friends of the Exchange were present. Luncheon was served and the visitors were given a good chance to see the workings of the Exchange, as business was brisk during the short session, many carloads changing hands. The Exchange room was handsomely decorated with palms and flowers, as were all the firm offices. Cigars and cigarettes were freely passed to the men visitors and the ladies were presented with carnations.

A number of short speeches were made, says the Pittsburg Grain and Hay Reporter, organ of the Exchange, the first being by President Geidel. "As an interlude to the address, which struck a sympathetic chord among the listeners, was his simile, prompted by a conversation with one of the elevator operators on his way up to the Exchange rooms on the seventh floor. Their dialogue was: 'Mr. Geidel, do you know that when I went up to look at the arrangements of the offices, halls and Exchange rooms on the seventh floor, I thought I was in heaven, everything was so grand and beautiful?' to which Mr. Geidel replied: 'Well, young man, I want to go to heaven; take me to the seventh floor.'" Continuing his address, Mr. Geidel said in part: "Now that we are in heaven, let us recognize the feeling of the innocent and pure and brotherly love for one another, and enjoy ourselves while here like little children, forget business cares and think of the present only.

"We are more comfortably taken care of and in a position, better than ever before to look after the constantly growing hay and grain trade of this vicinity. The prospects of Pittsburg as a terminal grain market has probably never dawned upon the average man of this vicinity. Pittsburg is, if not the only, at least one of the most important gateways to the East, and especially to territory immediately adjacent to Pittsburg and intermediate to such markets as New York, Philadelphia and Baltimore. Considerable of this territory, in fact, a major portion of it, is being supplied from markets other than Pittsburg. This is not as it should be; and our grain traders are at last awake to the situation, and I feel safe in saying that the possibilities of this market doubling itself within the next five years are not at all only an idealistic statement. I hope to see it an accomplished fact. It will require constant vigilance, but such is my confidence in the younger element of the present wholesale grain traders, that I can safely predict the fulfillment of this at present only an apparent variegated rainbow.

"The railroad companies are already aware of

this fact and through our very efficient railroad committee we are laying out plans to the mutual and profitable benefit of all concerned. We hope to see this market become such a factor in the grain trade of this country that it will be a credit to the city of Pittsburg, a city which already ranks as the leading business city in the whole country. The grain man, however, wants to feel that he also is a factor in making up a part of this already great city. To that end he is striving, and with earnest cooperation of every one assembled here today we will not be short of such an accomplishment.

"I could talk on the future of the grain trade for some time, but such is not our mission today. I again bid you welcome, and ask you to give your attention to the manner we do our business on the Exchange, in what we name 'call.' After 'call' we want you to inspect our Exchange quarters, and also those of our Exchange members located on this floor. Then join with us in luncheon ready to be served in the dining room from 12 to 2."

Ralph A. Schuster, with Rosenbaum Bros., Chicago, Jacob Able of Cleveland, D. G. Hood of the P. & L. E. R. R. were also called on and made pleasing speeches.

The Exchange is now in its twenty-eighth year.

PRESIDENT H. L. REMMEL.

H. L. Remmel, president of the Little Rock Board of Trade, Little Rock, Ark., is a native of New York state, who went to Arkansas thirty-four years ago to engage in the lumber business at Newport. Later he went to Little Rock, of which city he has been a



H. L. REMMEL.

resident for nearly fifteen years. He is now state manager of the Mutual Life Insurance Company of New York; president of the Mercantile Trust Company, and United States Marshal of the Eastern District of Arkansas.

He represented his county, Jackson, as a Republican in the state Legislature in 1887, overcoming a Democratic majority of nearly one thousand votes. He has been a delegate to nearly every National Republican Convention since 1884; has been chairman of the State Central Committee of his state for eight years; and is National Committeeman of the Republican League of Arkansas. He has made the race for Governor of Arkansas on three different occasions, each time largely increasing the previous Republican vote, his opponents being the present United States Senator James P. Clark, Governor Dan W. Jones, and United States Senator Jeff Davis. The campaigns were made in joint canvass. In short, Mr. Remmel's life has been one of continuous activity since he landed in the state in September, 1876. His tactfulness in presenting the claims of his great party in a state that is overwhelmingly Democratic has won for him and his party many friends. He has carried the banner of Republicanism in practically every county of the state, and has paved the way of good feeling for the new comer that wants to locate in this great state of marvelous opportunities in most every direction.

Mr. Remmel has been equally conspicuous in his business relations with men. He is a member of the Executive Council of the American Bankers' Association and vice-president for Arkansas of the Trust Company Section of said association. He has been president of the Arkansas Good Roads Association and is at present president of the Board of Trade and a member of the State Capitol Commission.

Mr. Remmel in going South "burned the bridges in his rear," and as a measure of his appreciation

of the South and a "guarantee of good faith," so to say, he married one of Virginia's fairest daughters, whose father and brothers were Confederate soldiers, and neither he, she nor they have had cause to regret the alliance.

FARMERS' MEETING AT ST. LOUIS.

The annual convention of the National Farmers' Union will be held at St. Louis on May 2-8; and President Manning C. Cochran of the St. Louis Merchants' Exchange has taken advantage of the occasion to extend an invitation to all the grain exchange members of the Council of North American Grain Exchanges to send delegations to St. Louis on the dates named. The invitation among other things says: "This is a meeting to harmonize as far as possible all discordant agitation and is within the scope of the council. We feel it is important to become posted on the demands of the agricultural organizations which are now more antagonistic than friendly to the grain exchanges. This is a rare opportunity to get their leaders and the exchanges in accord and to prevent resolutions or other action detrimental to boards of trade."

Gov. Hadley, who will deliver the address of welcome on behalf of the state at the Farmers' Convention, has been asked to have the entire National Guard of Missouri sent to St. Louis to participate in maneuvers during the meeting.

The committee in charge of the meeting is preparing a programme to include speakers from all parts of the United States, and is planning an especially interesting schedule for the day on which President Taft is invited, May 6. A barbecue or a banquet in his honor is planned.

AMENDMENTS TO EXCHANGE RULES.

Chicago.—By a vote of 387 to 105 the Chicago Board of Trade on March 14, amended its rule changing the rate on cash transactions for members to three-fourths of the present rates, instead of one-half. The commission rate on wheat, rye and barley is 1c. per bushel and corn and oats $\frac{1}{2}$ c.

A vote on the amendment to the clearing house, with regulations which provide that the admission of firms and individuals to clearing house privileges, as well as their suspension, shall be subjected to the approval of and discretion of the board of directors, was carried by a vote of 340 to 147.

Milwaukee.—The Milwaukee Chamber of Commerce on April 13 voted on an amendment to the Rules changing the grain inspection rules. The new rules are substantially those adopted by the Grain Dealers' National Association at Indianapolis as the "Uniform Grade Rules."

San Francisco.—The Rules of the Grain Trade section of the San Francisco Merchants' Exchange have been amended so that the Chief Inspector shall certify to the weight and number of sacks, as well as to the quality, of grain piled for and delivered on "time contracts" of the Merchants' Exchange.

St. Louis.—The following amendment to the Rules of the St. Louis Merchants' Exchange increasing the minimum commission charge to members has been posted for ballot on April 15, and will probably be adopted:

"Whenever any property as above described is bought or sold on commission, for account of a member of this Exchange, or for account of a firm or corporation, one of whose general partners or officers is a member of this Exchange, in good standing, the minimum charge shall be three-fourths of a cent per bushel on bulk wheat, rye or barley, and three-eighths of a cent per bushel on bulk corn and oats, on other commodities, including sacked grain, grain products, seeds, hay and castor beans, the minimum charge shall be three-fourths of the present rate charged to non-members. But in all such cases the member acting as commission merchant shall, in addition, charge exchange on drafts and interest at the current rate on all money advanced or paid by said member, or his firm or corporation, on account of or against such property, from the time of such advancement or payment to the time of reimbursement."

Omaha.—The directors of the Omaha Grain Exchange have made the following amendments to the Rules of that Exchange:

Amendment to Regulation 15 (Page 53) of the Rules and Regulations—"On all grain bought to arrive, interest can not be charged after eight days from inspection, and on all grain bought on the floor, interest shall not be charged after eight days from the date of the sale."

Amendment to Paragraph 3 (Page 36) of the Rules and Regulations—"On all grain sold on the floor, re-inspection can not be called after eight days from the date of the sale, and on all grain bought to arrive, re-inspection can not be called after eight days from the original inspection."

The Grain Standardization Laboratory hitherto at 420 Merchants' Exchange, St. Louis, will be removed to 15 Central Building, Kansas City, Mo. E. L. Morris, who has been at St. Louis, will remain in charge.

COMMISSION

The Millers' Grain Co. has opened an office at Wichita, Kan., with George Nott of Muscogee, Okla., as manager.

Williamson & Co., wholesale dealers in grain and provisions, of Salisbury, N. C., have completed arrangements to move to Richmond, Va.

E. W. Wagner of Chicago, has opened an office at Toledo, Ohio, with Geo. Shepherd, late of the Milwaukee Chamber of Commerce, in charge.

Arthur R. Sawers, grain merchant of the Postal Telegraph Building, Chicago, returned with his family the latter part of March from a month's vacation in California.

C. A. Foster, wholesale dealer in grain, hay, straw and feed at Pittsburg, Pa., moved his general offices on March 23 to a new suite of rooms, Nos. 701-703 Wabash Building.

The grain firm of P. B. & C. C. Miles, one of the oldest and best known on the Board of Trade of Peoria, Ill., has been incorporated. The incorporators are P. B., C. C., and J. C. Miles.

H. L. Stover has become general manager of the F. R. and D. C. Kolp Grain Company of Wichita, Kan., in place of former manager C. V. Brinkley, who has engaged in business at Oklahoma City.

The Hoosier Grain Company is a new firm to engage in the grain business at Indianapolis, Ind. The capital stock is \$5,000 and the directors are Cary Jackson, J. M. Brafford and P. G. Brafford.

The Gray Chalk Company of Indianapolis, Ind., has been organized with a capital stock of \$5,000 to do a general grain business. The directors are John R. Chalk, Fred L. Gray and John R. Gray.

C. F. Barnes of Duluth, Minn., has purchased a membership in the Wichita Board of Trade of Wichita, Kan., and is reported will take over the business, office, etc., of the National Grain & Flour Co., of that city.

W. N. Eckhardt of Pope & Eckhardt Co., Chicago, had a very trying experience recently in a fire which burned the hotel at which he was stopping at French Lick, Ind. Both he and his wife escaped from the hotel, but narrowly.

The Montana & Dakota Grain Co. of Minneapolis, Minn., has been organized with a capital stock of \$50,000. The incorporators are D. N. and C. J. Winton of Minneapolis, L. Hanson and Mr. Barzen of Thief River Falls, and M. L. Dunn of Culbertson, Mont.

The National Feed Company has been organized at St. Louis, Mo., with Abe Cohen, president, M. Schwartz, vice president, H. A. Adam, secretary and J. W. Cohn, manager. Mr. J. W. Cohn was formerly president of the Hunter Bros. Milling Co., and will have charge of the buying and selling. The firm is a member of the St. Louis Merchants' Exchange and will carry on a general feed business.

There was filed in the Circuit Court, Chicago, on March 25 a bill asking that a receiver be appointed for Eugene Purtelle & Co., former stock brokers with offices in Chicago and branch offices in Indiana. An accounting was also sought. The bill was brought by seven customers of the brokerage firm who recited that there was due them amounts aggregating \$5,000. It might be stated that the suit brought by Purtelle & Co. against E. W. Wagner of Chicago, has been dropped, there being no grounds whatever for action.

W. H. Merritt & Co., of the Chicago Board of Trade, was forced to suspend business on April 6 and a receiver was placed in charge of its business and property. The liabilities were estimated at about \$200,000 with assets of \$350,000. The expectation is that all creditors will be paid dollar for dollar. The suspension was in a measure voluntary on the part of the members of the firm, which found itself burdened with large supplies of corn which had been sold East but which had been refused by the purchasers owing to its alleged deterioration in transit. The firm has been in business for twenty years and has an elevator at Ninety-eighth Street and Calumet River, South Chicago.

The Burns-Yantis Grain Company, with offices in the Western Union Building, Chicago, met with financial trouble early in April. The firm has done a very large cash business since it came to Chicago from Buffalo, two years ago, and had extensive connections throughout the West and East. The business had been very profitable until recently when the condition of the corn market became so unsatisfactory that nearly all shipping houses doing any business of consequence have encountered losses due to corn getting out of condition in transit. No receiver was appointed for the firm and its affairs are being handled by a creditors' committee composed of J. P. Griffin, Kenneth Mitchell, Lowell Hoyt, and A. Gerstenberg, supervised by J. C. F. Merrill, vice-president of the Chicago Board of Trade. The liabilities of the Chicago and Buffalo houses were placed at \$200,000. At a meeting of the creditors of the company on April 11 the work of the creditors' committee and the

firm's condition was gone over very thoroughly and was found to be very satisfactory. Reports were that they would be able to pay 100 cents on the dollar.

BUCKET-SHOP CRUSADE.

The evil of the bucketshop is aggravated by the extent of the operations, which include a vast extent of the country. Many of the victims suffer loss through ignorance of the true character of the business. The action of the federal authorities is really, in a sense, protecting these innocents from the consequences of their own folly.—Troy Times.

Now it appears that the United States contends that the concerns indicted have conspired to violate the District of Columbia law, and on this ground they are indicted. If that is the situation, it appears that the bucket-shoppers have been careless, and that if they would keep out of the hands of Uncle Sam they should steer clear of United States territory and confine their operations to the states.—Taunton Herald-News.

By adopting the tactics that crooks themselves use, tapping the wires leading to the bucket-shops, the government officials have secured enough information to lay bare the operations of the gamblers. Expert operators for a week took every message sent over these private wires and indisputable evidence of the illegal character of the business was secured.—Schenectady Star.

If bucket-shops were put out of existence, there would be much less complaint against the so-called gambling in grain, cotton and stocks. Those who criticize produce and stock exchange transactions as a rule do not understand the difference between the operations on a bona fide exchange and in a bucket-shop.—Winnipeg Tribune.

If the Federal prosecution establishes its point and convicts these bucket-shop operators it will tend to bring that particular form of gambling into subordination everywhere. Every bucket-shop operator does not have a Washington connection, and is not subject to Federal prosecution, but if the Federal Government can curb this evil within its jurisdiction every State can do it as well if it really wants to. This evil has survived because of the difficulty of separating the illegitimate from legitimate stock operations in all cases, and partly from lack of adequate laws or zeal for enforcing them. The Federal Government, if it succeeds in its present prosecution, will throw new light on the subject and will give new impulse to a movement for the suppression of this evil within both national and State jurisdiction.—Philadelphia Press.

It may be suggested that it would be utterly impossible for any telegraph company to accept quotations for transmission all day and every day, with the large revenue thereto attached, without an accurate knowledge of where the money came from, and the purposes for which the quotations were used. Not only would this be the case, but the quotations themselves must have been supplied from a known source which could be located without the slightest difficulty. Perhaps some of the directors of the Western Union will spend half an hour of their valuable time in settling these two questions for themselves.—Wall Street Journal.

The maximum penalty for the swindling with which the bucket-shoppers are charged entails two years' imprisonment and a fine of \$10,000. It is to be hoped that those who are convicted will receive the maximum punishment. The offence is deserving of vigorous treatment, so that a repetition of this species of crookedness may not offer allurements to those dishonestly inclined. That the Government has taken up the prosecution is cause for deep satisfaction.—Philadelphia Telegraph.

The administration is to be congratulated on the thoroughness with which it attained the object sought. The blow to the bucket shop system is a fatal one, and if the pursuit of the stragglers is as determined as was the inception of the plan and the preliminary campaign, it can but prove a complete and lasting success. The Department of Justice is engaged in other campaigns, and this criterion speaks well for the success of its operations.—Washington Herald.

So now, the gentlemen who have been conducting the establishments called bucketshops, of which a Wall street wit once said that they are places to which one takes a barrel of money and comes away with only the bung hole, might as well accept the fact that their occupation is gone.—Albany Journal.

If the indicted bucket shop operators, with main offices in New York and other cities, had kept out of Washington they would have been beyond the reach of federal justice. They would have been amenable to state laws alone, and those laws are usually a dead letter. They were too greedy. They knew that there was money to be made in Washington, for there is a large speculative element there, particularly when congress is in session. So, relying on the sleepiness of federal officials, they took their chances. They went on raking in money, unknowing that they were being investigated.—Chicago Tribune.

ASSOCIATIONS

A meeting of the Northwestern Ohio Hay and Grain Dealers' Association was held at Lima on March 23 with about 40 members present.

The seventeenth annual convention of the National Hay Association will meet at the Hotel Breakers, Cedar Point, Ohio, on August 23-25, 1910.

Sec'y S. W. Strong reports the following new members of the Illinois Association: Rumsey, Moore & Co., Peoria; H. H. Palmer, Hillsdale, Moses Dillon Co., and Frank Heflebower, Sterling; Martens Bros., Randolph; The Coyle Grain & Coal Co., Gridley, and A. R. McCallister, Bentley.

The Illinois Grain Dealers' Association has lately effected a permanent arrangement with the Chicago & Alton and the Wabash R. R. Freight Claim Departments, as follows: 1. There will be no claim filed with us for \$3 or less; 2. On claims in excess of \$3, where the record of handling seems perfect, the members of the Association will make the usual allowance; 3. Where claims exceed \$3 and there is evidence of leakage, they will be paid without the Railroad Company asking for a deduction.

A meeting of the Farmers' Elevator and the Independent Grain Dealers' Associations of the South Platte country was held at Lincoln, Nebr., in March last; and after much discussion the two associations were consolidated and will be hereafter known as a local branch of the Kansas Grain Dealers' Association. Many prominent men of both organizations were present, among them E. J. Smiley, secretary of the Kansas Grain Dealers' Association. The Farmers' Elevator Association is said to number about 100 and the Independent stations about sixty.

DOCKAGE AT NEW ORLEANS.

Sec'y Strong of the Illinois Association has furnished us the following copies of correspondence in relation to the scaleage at New Orleans:

"Referring to my letter of the 10th ult., concerning the matter of dockage on inbound shipments of grain. The question has been up with the New Orleans Board of Trade since, and it has been suggested, in view of the grain now on hand in elevators, and contracts which have not yet been completed, all based upon reduction of two pounds per one thousand, that the proposed change in our arrangements be made on June 1st next, and we will arrange accordingly."—[Signed by F. B. Bowes, General Traffic Manager of the Illinois Central Railroad with office at Jackson, Miss.]

ILLINOIS GRAIN DEALERS' MEETING.

The executive committee at Decatur in charge of the arrangements for the annual meeting of the Illinois Grain Dealers' Association has arranged for a number of prominent men to deliver addresses at the convention, which will be held in Decatur on June 7 and 8.

Lawrence Y. Sherman, former Lieutenant-Governor, now chairman of the State Board of Administration, of Springfield, will speak on "Ethics of Business." An address on "The Relation of the Railroad and Warehouse Commission to the Shippers" will be delivered by Orville F. Berry of the Commission; and Prof. C. G. Hopkins of the University of Illinois will speak on "Raising More Corn and Oats."

ILLINOIS ASSOCIATION DIRECTORS' MEETING.

The Board of Directors of the Illinois Grain Dealers' Association held a meeting at the St. Nicholas Hotel, Decatur, on March 30th, at 1:30 p. m. Those present were, Geo. D. Montelius, president; H. A. Hillmer, vice-president; Edwin Beggs, A. G. Tyng, J. E. Collins, J. H. Graham, directors; H. I. Baldwin, treasurer; and S. W. Strong, secretary. There was also an attendance of about forty grain dealers of Decatur and surrounding territory.

The following new members were voted into the Association by the directors: The Coyle Grain & Coal Co., Gridley; Otto Keusch, New York; Karcher & Jackson, Herscher; Martens Bros., Randolph; Mathis Bros. & Co., Prophetstown; A. R. McCallister, Bentley; McCord, Crockett & Kolp, Memphis; L. A. Morey Co., New York; Nashville Grain Co., Nashville; Rumsey, Moore & Co., Peoria.

Mr. E. M. Wayne of Delavan, delegate of the Illinois Grain Dealers' Association to the National Council of Commerce, made a report of the meeting of the National Council of Commerce which he attended at Washington, D. C., in December, 1909, which was very interesting. He stated that he believed that if the National Council of Commerce were put on a good financial footing, it would be of much benefit to the grain trade and all other lines of business in the country; that nearly all the foreign countries had similar organizations which were of much benefit to their governments. He secured information that the National Council of Commerce was fostered and encouraged by Secretary Nagle, of the Department of Commerce and Labor and member of President Taft's cabinet.

A report was received in relation to the Claims

Department of the Association, and the results have been very satisfactory indeed. Definite arrangements have been concluded with the C. & A. and Wabash Railroad Companies for the payment of claims filed through the Association's Claims Department, and every member is recommended by the board of directors to file claims for loss in transportation whether the cars are leaking or not without asking, and they will be collected.

Arrangements were made for the 17th Annual Convention, to be held in the City of Decatur, June 7th and 8th next. The G. A. R. hall was secured for meetings of the Convention. Headquarters will be at the St. Nicholas Hotel. The following committees were appointed by the Board to have charge of the Convention:

General Executive Committee—W. L. Shellabarger, chairman, E. M. Wayne, N. A. Mansfield.

Entertainment Committee—H. I. Baldwin, chairman, O. H. Cannon, H. C. Corman, F. L. Evans, J. E. Quigley.

Committee on Ladies' Entertainment—C. P. Cline, chairman, J. E. Collins, H. I. Baldwin.

Press Committee—Decatur Herald, Decatur Review, American Elevator and Grain Trade, Grain Dealers' Journal, National Hay and Grain Reporter.

On motion, the general executive committee was empowered to appoint a reception committee.

On motion the board adjourned.

S. W. STRONG, Secretary.

THE MOISTURE TEST REPORTS.

The "American Elevator and Grain Trade," in the March number, gave largely of its space to the complaint of representatives of the Illinois Grain Dealers' Association and of individual grain dealers of Illinois against moisture test as a criterion for the grading of grain, because it has on the current crop caused heavy losses to shippers on "to arrive" contracts. The final meeting at Chicago to consider the complaint, a conference by a select committee of seven from the Illinois Association and the Grain Committee of the Board of Trade, adjourned without being able to agree on a recommendation to the Railroad and Warehouse Commission, but with the understanding that each party to the conference submit to the Commission its views of the matter at issue.

The representatives of the Association thereupon submitted a 95-page stenographic report of the debate and speeches made at the conference, together with the following brief, while the Grain Committee submitted the statement printed below. Both brief and statement are as follows:

THE BRIEF OF THE ILLINOIS ASSOCIATION

By S. W. Strong, Sec'y, for the Committee.

I have the honor to transmit herewith a stenographic report, covering ninety-five pages, of the discussion had at a joint meeting of the Illinois Grain Dealers' Association and the Grain Committee of the Chicago Board of Trade, which was held in the directors' room of the Chicago Board of Trade building on March 2, 1910, which meeting was held at the suggestion of your Honorable Commission.

Your careful perusal and consideration of this report is asked, as from it you will learn the real positions of the two committees. From it you will learn that the committee from the Association asked but little; and that the committee from the Board of Trade were not willing to concede anything.

On Pages 71 and 72 is recorded a resolution submitted by the grain dealers' committee, upon which the Grain Committee from the Board of Trade refused not only to vote but to in any manner commit themselves during a meeting, which lasted four hours.

The record will disclose the very great variation of moisture tests, which was also shown to your Honorable Commission on the 24th of February, last.

The record will disclose, we believe, the determination of the Grain Committee to delay the adjustment of the petition of the Grain Dealers' Association until the entire corn crop of 1909 has passed through their hands and the last and utmost discount been exacted from the people by the application arbitrarily of a rule erected by the people of the state of Illinois to protect themselves from the greed and avariciousness of exchanges and boards of trade.

The record will disclose that the country shippers of the state, who really represent the producers also, only ask that the corn from the farmers and shippers of Illinois should be graded by your inspection department for what it really is and for what it is really worth,—that corn which is really worth in dollars and cents and truly of the grade of No. 3 should be accorded that grade as a right and as a matter of justice and honor; and that the rules of the department should not be manipulated by specious handling to the disadvantage of the farmer and shipper, who must of a necessity rely on the department of inspection, in which they have the greatest trust.

A careful reading of the record will, we believe, show you that the country only asks what is right and just, and that the Board of Trade were playing for the most rigorous application of a rule which has been shown to have so much variation as to be very far from a fair arbiter of the rights of the seller and buyer, with the sole idea in view of exacting a penalty from a seller who had in all honor and righteousness filled his contract.

The only agreement of the joint committee was that two reports be made,—that the committee of the Illinois Grain Dealers' Association should make a report to your Honorable Commission and that the

Grain Committee of the Board of Trade would report to the board of directors of the Chicago Board of Trade.

We beg to report that we have not been favored with a copy of the report of the Grain Committee, though we have furnished them a complete report of the minutes of the joint meeting. We submit that it was never the intention to adopt the moisture test as the sole factor in determining the grade of corn, but as only one, and a minor one, to be considered with the other requirements to fix the grade.

We earnestly urge upon your Honorable Commission that you will as soon as may be determine our petition and give the shippers and producers of the state relief from the onerous conditions under which they are now struggling.

THE STATEMENT OF GRAIN COMMITTEE.

The following statement, signed by J. C. F. Merrill, R. E. Tearse, F. H. Rice, Geo. A. Wegener, J. C. Murray, E. G. Brown and E. L. Glasier, grain committee of the Board of Trade, was also addressed to the Railroad and Warehouse Commission:

On the suggestion of your chairman, a committee representing the Illinois Grain Dealers' Association met the Grain Committee of the Chicago Board of Trade on Wednesday, the 2d instant, at the Board of Trade, to confer relative to the maximum moisture content of 19% allowed in the grades of No. 3 corn under existing rules of the State Inspection Department.

The conference extended over several hours, with full and free exchange of opinion of those participating. The result was a unanimous vote to render two separate reports, one each from the delegates from the Illinois Grain Dealers' Association and the Grain Committee of the Board of Trade.

The discussion developed that the complaint of the Illinois grain dealers relates more to market conditions than to incorrect or unreliable grading. In other words, that it is a market condition rather than a question of moisture content. This condition is consequent upon larger sales of corn of the No. 3 grade than can easily be delivered, due to the fact of wet corn having been frozen up last December and early in that month, and having remained frozen so constantly since that time, that no improvement, or insufficient improvement, has occurred to permit it to be passed into the No. 3 grade; hence the small receipts of that grade and the large receipts of No. 4 corn and of Sample grade have produced an unusual difference in the price between them,—in short, in the last analysis, a question of supply and demand. Such cars as do grade No. 3 are close to or at the maximum of 19%, with none down to 17%; therefore buyers complain that they are getting only corn which is but slightly better than No. 4, instead of a fair average of the grade.

The maximum content of 19% was arrived at after more than three years of thorough investigation and consideration on the part of the grain trade throughout the country. The Illinois Grain Dealers' Association has repeatedly endorsed it in convention assembled and its delegates in the Grain Dealers' National Association have invariably voted in favor of it. They have united in a general effort on the part of that Association to uniformize the inspection rules throughout the country. When your Board met here last fall to listen to representations relating to the adoption of our present rules, nobody appeared in opposition; grain dealers, grain shippers and warehouse men, all desired the adoption of the rules.

Other markets to which Illinois corn goes for its initial inspection have followed your action in this regard. The state of Missouri recently put into effect the same rules. Peoria uses them; so does the Indianapolis Board of Trade, the Cincinnati Chamber of Commerce and the Buffalo Corn Exchange. All of these markets receive Illinois corn on direct shipment from Illinois and for inspection. A long list of other markets which have likewise adopted is appended hereto, also a list of state and local grain dealers' associations and millers and other associations using or approving them. This committee gave a hearing to Board of Trade members two days before it met the delegates of the Illinois Grain Dealers' Association and but two members appeared to advocate the proposition to permit corn of greater moisture content than 19% to be graded No. 3, while a considerable number appeared in opposition to such action.

Specific reasons why such change should not now be made are, first and fundamentally, that such change would violate existing contracts, made and duly entered into on the basis, and with no other intent, than 19% maximum. It has not been the custom of your Board to make such change during the movement of a crop, and aside from the legal complications such action would involve, a question of good faith would also arise, the business public being entitled to believe that your Board would not make such change at such a time. Second, inasmuch as the proposed change could not be effected short of approximately one month, and inasmuch as the cause of such change being desired by the Illinois dealers is the heavy deduction required when corn falls to grade No. 3, and inasmuch as this excessively wet corn will, it is confidently believed, have all been marketed by or before that time, the change would not operate to their benefit, and injury to the cause of uniformizing grades throughout the United States would be set back by the most influential and important body in matters pertaining to inspection of grain in our country.

Self interest or, more plainly stated, selfish interests, instead of a broad and general survey of the best interests of the grain trade throughout the state at large, actuate the demand for this change. This is said without intending any disrespect to any members of the Illinois Grain Dealers' Association.

Objections have been filed to the proposed change with this committee from the St. Louis Grain Exchange, from Omaha, Nashville, Tenn., and others

including the Grain Dealers' National Association, insisting that the Uniform Rules as promulgated by the Grain Dealers' National Association, on the recommendation of the Chief Grain Inspectors' National Association, of which, and participating in its action, Chief Inspector Cowen is a member, should remain in force.

It should be remembered that the Illinois Grain Inspection Department has practically been governed for two years past by the 19% maximum, and, as herein stated, the Illinois Grain Dealers' Association has approved of that action.

Your Board will recall that when, three years ago this winter, the Grain Committee of the Board of Trade appeared before you to make a representation in favor of such a rule, President Wayne of the Illinois Grain Dealers' Association was present and gave his consent.

This committee strongly urges you to hold firmly to the present rule, believing that the reasons given by those desiring a change are of a temporary nature; that those not desiring such change largely outnumber them; and that the reasons why such change should not be made are vital and greatly of more importance; that the interests of all should be considered.

It should be remembered that had not more contracts been made for the delivery of No. 3 corn than can be readily filled, present conditions would not exist; without such demand, the corn would sell at a market parity of the several grades. The relatively high price for May corn in this market has made the buying of 19% moisture corn profitable to be dried down to the maximum of 16% in No. 2 corn, hence the liberal contracts entered into and above referred to.

During past few days arrivals of freshly shelled corn are testing down to 18% and below this, thus showing what marked influence the weather of past two weeks has had and indicating, as above claimed, that within another four weeks it will have carried practically all of that in cribs to below the 19% basis. We recommend to your honorably body the greatest possible care in both the sampling of cars and the taking of moisture tests.

[Approved by the directors of the Chicago Board of Trade, at its regular meeting, Tuesday, March 8, 1910.]

BARLEY and MALT

The Government in the March Crop Report estimated the barley still in farmers' hands at 41,200,000 bus., or 24 per cent of the crop of 1909. This is contrasted with Van Dusen-Harrington's estimate of only 17 per cent, which Prinz thinks is more reliable. This is the first time, by the way, that the Government has made an estimate of barley in farmers' hands on March 1.

TENNESSEE WINTER BARLEY.

I notice with a good deal of pleasure, says Wm. H. Prinz in the American Brewer's Review, that the Tennessee Agricultural Experiment Station has revived, or resurrected, the old fine Tennessean winter, or fall, barley; and that the United States Department of Agriculture, Circular No. 12, by Wm. M. Jardine, says it is expected that within a short time a number of reliable winter varieties of barley will be ready for distribution among the farmers. In fact, we have at this time one such variety known as Tennessean winter barley. This was originated at the Tennessee Agricultural Experiment Station in 1900. It has been successfully grown as a winter variety as far north as central Nebraska. Its popularity is constantly increasing, especially in Kansas, where it is rapidly displacing the spring types. Its yield is usually about one-third better than that of the spring variety, and its quality is equal to the best. The Tennessee winter variety is considered as thoroughly established. A limited amount of seed can be obtained from the leading grain dealers in the central plains area.

I have always been a friend of winter, or what we call fall, barley, as the way it grows must make a superior barley with a much better flavor and aroma, and a malt made from it will make the finest bottle beer. Its growing process comes nearer to ideal malting conditions,—starting slowly in germination; whereas our spring or summer barley comes nearer to the rapid malting process practiced by a good many maltsters of today; but the future will show it is the slow process that is far superior and is the only right process that should be used.

A type of this winter barley has always been raised along the lake shores and Ohio, and is raised there today, and the malt made from it commands a higher price. In the Southern and Middle States, and also in our state of Illinois, there was at one time raised considerable barley known as Scotch barley but which was really nothing but the old Pomeranian winter barley, which is also the parent of the new Tennessean winter barley. But through not practicing crop rotation and the chinch-bugs an end was put to the raising of barley. And the fact that the brewers and maltsters paid a higher price for unripe, unmaturing, greenish bright barley, forced the farmer to cut his barley before it was ripe, and when this unmaturing and unripe barley was used as a seed barley, it deteriorated fast, and became what is called shoe-peg barley.

FIELD SEEDS

The D. M. Ferry Seed House at Detroit is to be enlarged by addition to cost \$70,000.

The N. L. Willett Seed Co., 309 Jackson St., Augusta, Ga., has increased its capital stock to \$30,000. Henry Nungessen & Co. have been incorporated at Jersey City to deal in seeds, etc.; capital stock, \$50,000.

The State Board of Regents of South Dakota will build a seed house at the Experiment Station at Cottonwood.

Otto Schwill & Co., seeds dealers at Memphis, Tenn., will erect a 4-story concrete building for housing their business.

The Freeman-Bair Co., Aberdeen, S. D., have issued a seed bulletin covering a full line of garden and field seeds, including of course corn, and the small grains.

It is said that 15,000 acres on the ridges in northern Idaho will be planted to beans this season, the largest area being in the Juliaetta district, where 10,000 acres will be devoted to the vegetable.

The McCaul-Dinsmore Co., Minneapolis, report that the flax crop in Montana will this year be the largest the state has ever raised, and it will be one of the greatest raised anywhere in the country.

The agricultural stations of Minnesota and Kansas have both had applications for seed wheat from the Transvaal Department of Agriculture, the former for the "No. 169," and the latter for "Turkey Red grown by the station."

The Greenville County Corn Growers' Association was organized on April 3 at Greenville, S. C. W. H. Barton, county demonstration agent of the United States Department of Agriculture, was elected president and J. B. Davis, county superintendent of education, secretary.

"About Seed Grain" is a bright, crisp, "boiled down" and beautiful booklet on "better farming" and "better seed," prepared and distributed by The Van Dusen-Harrington Co. Seed like this booklet must be industriously circulated if every American farmer is to be aroused to his responsibilities and opportunities.

Northrup, King & Co., seedsmen at Minneapolis, recently shipped a carload of wheat, flax and grass seeds to the agricultural department of the Argentine Republic for experimental work. The same firm has shipped seeds for the same purpose this season to Mukden, Manchuria, and to Russia, South Africa and Australia.

Linseed oil crushers of Minneapolis have raised a fund and will begin an active campaign of education among farmers, with the purpose of increasing the acreage sown to flaxseed, and the yield. Last year the production of Minnesota, North and South Dakota was small, comparatively, and a crop that at one time promised as high as 26,000,000 or 28,000,000 bushels, did not yield that quantity, falling short by several million bushels.

The Iowa pure seed law is strict. While it is recognized that it is impossible to prevent a small per cent of weeds and other foreign growths from appearing in common seeds, there are certain seeds which the law bars in grass, cereals and other staple seeds. Those prohibited are wild mustard or charlock, quackgrass, Canadian thistle, wild dodder or corn cockle. Labels required by the seed law should be printed or written on all packages of seed.

The record price for flaxseed in this country was made on March 22 at Duluth, when \$2.31½ per bushel was paid, against \$2.27½ on the 21st and \$2.27 on January 7. Even at the above prices manufacturers of linseed oil are unable to get the amount of seed required to keep their mills going. About 35,000,000 bushels of Argentine seed have been imported this season, but that market has now reached a stage where no more is available for shipment, except at emergency prices.

The Northern Wisconsin Seed Co. has been organized at Sturgeon Bay; capital, \$25,000. The executive officers of the company are: Carl E. Dreutzer, president, and Ralph W. Crary, vice-president, the latter being president of the Crary Canning Co. of the same city. The company will make a specialty of growing seed peas, principally of the Alaska and market garden varieties, and considerable acreage has already been contracted for in Wisconsin and Michigan, in which state also the company will do business.

The Wood County Corn Improvement Association has been organized at Bowling Green, O., with G. C. Housekeeper as secretary. It is proposed that this season all members shall meet at a certain farm near Bowling Green on a certain day and that each man shall plant two rows (and possibly four) with the corn he has found most productive. Each man is to keep his rows hoed and thinned out, but the owner of the farm will cultivate all of it and own the crop in the fall. At harvest each will cut and shock his own rows; and when the corn is dried out, there will be a grand husking bee, each man

husking his own rows. The corn will then be weighed to find out who has done the best.

THE CORN SHOWS OF 1910-11.

The annual exhibition of the National Corn Association will be held at Columbus, O., from January 30 to February 11, 1911.

The first show of the New England Corn Exposition (Inc.) will be held at Worcester, Mass., on November 7-12, inclusive, 1910. N. H. Brewer of Hockanum, Conn., is president of the association, a man who has done more than any other one man in New England to awaken interest in this cereal in that part of the country. Wm. D. Hurd, Amherst, is secretary. Liberal money prizes will be given to exhibitors of corn, and lectures on corn raising and farm improvement in general will be given each day of the exposition, while a cooking school will be in operation for demonstration purposes.

PROMINENT IOWA SEED HOUSE.

The Adams Seed Company of Decorah, Iowa, a picture of whose warehouse appears herewith, was organized in October, 1906. The firm consists of B. H. Adams and W. C. Adams. The former has grown up in the seed business with the elder N. H. Adams, who has been engaged in this business for 44 years and is still at it. N. H. Adams many years ago established a reputation for pure seeds, his specialty being timothy, for which commodity he has a good reputation through the East and South.

The Adams Seed Company not only employs the senior Mr. Adams's methods in cleaning and handling timothy, but have broadened the business un-



ADAMS SEED CO.'S HOUSE, DECORAH, IA.

til it embraces nearly all field, grass and garden seeds. They are expert cleaners and their "Purity Brands" of clover, timothy and other seeds have a splendid reputation throughout the country.

In the summer of 1909 they completed the building shown, which is fully equipped with the latest machinery for the handling of field seeds.

The Adams Seed Company solicits shipments from the farmers and maintains an open market all the year around. They pay as high prices as Chicago or any of the large markets for same quality of seed. The business of this firm is based upon the foundation of square dealing. All seeds sold that are not as they are represented can be returned; for all seeds were sold subject to "Ames Test" before the Iowa seed law was passed.

CANADIAN SEED IMPORTS.

As Canada imported garden, field, and other seeds and bulbous roots valued at \$2,083,619 in the last fiscal year, Consul Frank Deedmeyer, of Charlotte-town, has prepared some data in regard to this trade. He says among other things:

"The import of these articles has grown rapidly in the last ten years, being in 1909 four times larger than in 1900. As shown by statistics, the United States furnishes practically all of the seeds and roots received by Canada from abroad. The market for these American products is capable of enlargement. Farming is undergoing a change in the maritime provinces and in lower Canada. The cereals for export are now grown in the west. In the east agriculture is becoming more diversified. The farmers aim at a variety of crops, raised from selected seeds. Cities are growing and market gardening is becoming more profitable every year.

"As a means to extend the sale of seeds and roots in Canada it is suggested that American exporters exhibit the seeds and developed fruits at the agricultural fairs, held every fall in all sections of the Dominion. These fairs, or exhibitions as they are more generally called, are held for counties and for provinces, and are much encouraged by the local governments and well attended. The dates when these exhibitions are held and at what points can be learned by American exporters on application to the American consuls in Canada."

On the free [of import duties] list are annatto, beans, beets and mangolds, carrot, mustard, peas, rape seed, turnip seed, mushroom spawn, and anise, anise-star, caraway, coriander, cardamom, cummin, fenugreek, and fennel; on the dutiable list are clover and grass, garden, field and other seeds for agricultural or other purposes, sunflower, canary,

hemp and millet seed, garden and field seeds, not specified as free and valued at not less than \$5 per pound, in packages of not less than one ounce each, all at 10 per cent ad valorem; and flax seed, 10 cents per bushel. A list of the dealers in seeds in the Province of Prince Edward Island, Canada, can be obtained from the Bureau of Manufactures.

CLOVER SEED.

New clover crop is doing nicely in nearly all sections. Acreage fairly large. Some sections will carry over considerable old seed, but more are fairly well cleaned out.—King & Co., Toledo.

R. Liefmann Söhne Nachf., Hamburg, in circular of March 7, 1910, say American prices of clover are too high to admit of sales there, where the market has a downward tendency, attributed to dull business in December-February, "and business of the last three months, and the fact that supplies in the hands of the smaller dealers turned out rather larger than was anticipated. Furthermore some firms, as in your country, made efforts to break the market by flooding the entire country with bearish letters and circulars predicting lower prices, and in consequence of this move many buyers deferred purchasing. However, prices have steadied at the decline, the demand getting more active. From careful information [we can say that] about 20 to 25 percent of the total requirements will have to be filled yet, and this means quite a large amount, considering that Germany alone needs about 30,000 tons and Great Britain 5,000 to 6,000 tons Red Clover seed annually. On the other hand, a larger import from South-Russia will scarcely be possible owing to considerable wants in the other parts of the empire."

ALFALFA SEED.

Speaking of the imported alfalfa seed, a large quantity of which comes through Hamburg, Germany, although the point of origin is not always clear, the Colorado Agricultural College News says: "Much of this seed is apparently of good quality,—quite free from weed seed and other adulterations. However, some of it has carried a considerable amount of noxious weed seed. Some of these samples were represented to be Turkestan. So far none of the samples examined was Turkestan. The Turkestan seed is rather easily distinguished on account of its color, and certain physical markings, so there is very little chance of making a mistake when examining it; yet there seems to be a considerable amount of alfalfa seed on the market sold for Turkestan, which is really something else."

"The question of where the seed is grown is a very important one—much more important than is usually thought."

"In frequent cases the seed produced in warmer climates than our own has given very unsatisfactory results. Much of the crop from seeds produced in these milder regions kills out the first year. It is impossible to tell from looking at the seed whether it was produced in a warm or in a rigorous climate, consequently, it is impossible to tell, from an examination of a sample of alfalfa seed, whose source is unknown, whether it is good seed or not. It may be bright and clean, free from weed seeds and have a high germinating power, and yet be almost worthless because of its source. Where grown in a climate milder than our own, it will almost invariably give dissatisfaction."

THE GOLDEN FLAX.

The "Golden Flax," which has lately attracted some special attention in the Northwest, is not cordially welcomed by the experts. It is not entirely new, and the tests made of it in the Northwest are not favorable. Prof. Bolley, the North Dakota expert, says:

"I have tried all the varieties of white seeded flax that I could procure for the last five or six years, and I think I have them all, but of course it would be unreasonable for me to assume that this particular strain of white seed flax called 'Golden,' is exactly the same as those which I have previously tried. It appears to be. None of them compares with the common flax in suitability for Northwestern conditions. They grow only about a foot high and are hence hard to reap and are almost continuous bloomers,—that is to say, not maturing evenly with us. They are also non-disease resisters. I have tried hard to get a single plant from them, and have been unable to do so. They die out entirely on old flax-sick soil."

"I have advised not to run the risk of deceiving farmers by advocating the seeding of this flax. The flax-seed growing in North Dakota is on its last legs, and while I welcome every effort to save the industry, or the business, it must be done along careful lines so that the average farmer will not finally give it up in disgust."

"While traveling in Southern Europe and Russia I was continually informed by the crushers that the small seeded brown flax of Russia may be relied upon to give from 36 to 40 per cent of oil, while the white seeded varieties and the big seeded varieties ran from 33 to 36 per cent. I am not an expert from this standpoint; but all information goes to show that the highest percentage of oil attainable

is to be found in brown seeded Northwestern grown flax. All other varieties have heavier seed coats and less oil. This particular strain of white seeded flax may be different than anything that I know of."

MILO

The Colorado Agricultural College is industriously promoting the culture of milo in that state as a feed crop. Milo is a non-saccharin sorghum and is a close relative or Kafir, but it is not a maize, though often called "milo-maize." Milo grows erect, with thick, short-jointed stalks, attaining an average height of from four to seven feet. The grain is borne in heads at the top of the stalks. These heads reach a considerable size and are relatively short and compact. Where the stand is thin, the heads get very large and turn downward by their own weight. With thicker stands the heads are smaller and stand erect.

In growing milo, says Alvin Keyser of the Colorado Agricultural College, it is essential to get the right variety to start with. There are two types of milo on the market—the yellow and the white. Yellow milo is superior to white milo. There are quite a number of varieties of the yellow milo. These vary in height from two feet to fifteen feet. The extremely dwarf and the extremely tall forms should be avoided. Those varieties which grow to a height of from four to six feet, under ordinary conditions, are preferable. The extremely dwarf sorts do not yield well enough. The tall varieties mostly come from the South, consequently, they are late maturing and less drouth resistant than those which grow to a medium height. Home-grown seed is preferable whenever it can be obtained.

INFORMATION ABOUT SORGHUM.

Though all the cultivated "sorghums" probably came originally from a single wild species, the term as now used includes a great number of cultivated varieties differing widely in character. These are commonly divided into two general classes, (1) the saccharine sorghums which have sweet juice and are now called sorgos; and (2) the non-saccharine sorghums which include Kafir corn, broom-corn, durra, shallu, kowliang and some others.

Different varieties of sorghum have been in cultivation in India, China, and in different parts of Africa for many centuries. Pliny recounts its introduction into Italy during the first century of the Christian era.

The seeds of sorghum are largely used for human food in India and in parts of Africa and to some extent elsewhere. In nearly all the temperate and tropical regions of the world, sorghum is grown both for grain and forage.

In this country the value of sorghum is well recognized. It is widely cultivated as a fodder crop and to a considerable extent as a grain crop. At one time the Government experimented for several years in the manufacture of sugar from the saccharine varieties, but the results secured did not justify the hope that sorgo would become one of the great sugar-producing plants of the world. Considerable quantities of table sirup are manufactured from it every year, though this industry is probably on the decline.

The U. S. Department of Agriculture has recently issued two publications relating to sorghum—a bulletin on "The History and Distribution of Sorghum," and a circular for free distribution on "Three Much Misrepresented Sorghums." The object of the latter is to set the people right concerning some mistakes and misrepresentations.

Recently an Oklahoma man has been selling at 50 cents a pound seed grain of what he calls "California wheat," which he declares will produce 200 to 400 bushels per acre. The Department shows that this is a variety of sorghum, known as shallu, which, after thorough test a few years ago, proved only about half as productive as Kafir corn. It is also inferior as a forage crop.

The second of these "misrepresented sorghums" is a so-called "chocolate corn," accounts of which have appeared in the press at different times. The Department announces that it never had any seed of "chocolate corn" for distribution and that the plants which have sometimes received that name were simply varieties of sorghum, probably in most cases the "Early Amber Sorgo."

The sale of sorghum seed in the South under the name of "Texas Seeded Ribbon Cane" by certain seedsmen has led to much confusion and disappointment. The use of the term "Ribbon Cane" is the cause of the trouble, since this is the popular name for the sugar cane of the South which does not bear seed. The impression spread by advertisers of this seed was that they were offering a variety of the sugar cane which would produce seed, and there was a large demand for this seed which, in fact, was nothing more than "gooseneck" sorghum. The demand eventually exhausted the supply of seed and the seedsmen began filling orders with other sorghum seed. The fraud was promptly exposed by the Department of Agriculture, but the sale of this seed continues. The Department urges that the name "Seeded Ribbon Cane" be discontinued because it is misleading.

HAY AND STRAW

Work on the new alfalfa mill in Fairbury, Neb., is being hastened.

The Martha Alfalfa Milling Co. of Martha, Okla., recently installed a sixty horsepower gasoline engine.

Powell & Wilson have commenced excavation work for a large alfalfa mill in Marion, Red Willow County, Neb.

Major Moberly, secretary of the Oklahoma City, Okla., Board of Trade, has bought the Standard Milling Co.'s alfalfa plant at that place.

The Cheraw Alfalfa Milling Co. of Cheraw, Okla., has been incorporated with \$15,000 capital by John Weisthould, George K. Beaman and W. R. C. Furman.

A 20-ton alfalfa mill to cost \$12,000 will be erected by farmers at once in Ben Davis, near Caldwell, Idaho. Over 4,000 tons of hay will be available for the first year's run.

The Consolidated Alfalfa Milling Co. of Oklahoma City, Okla., contemplates establishing a mill in Terrell, Texas, with \$20,000 capital to manufacture meal from green alfalfa.

The Southern Alfalfa Co. of Columbus, Miss., has been organized with \$200,000 capital by B. A. Weaver, N. C. McClure and others. Cattle food from alfalfa will be manufactured.

Mr. George Hadrill, secretary of the Montreal Board of Trade, has been advised of the appointment of A. G. McBean as chief inspector of grain and hay for the Eastern Inspection Division of Canada.

The Consolidated Alfalfa Milling Co. of Oklahoma City, Okla., which is to erect a \$20,000 alfalfa mill in Lake Arthur, N. M., has presented its plans to the Commercial Club of that place. One-half of the money for the plant will be subscribed by citizens of Lake Arthur.

A concern with \$25,000 paid up capital has been formed in Pecos, Reeves County, Texas, for the purpose of erecting and operating an alfalfa meal mill. F. W. Johnson, W. D. Cowan, E. W. Farwell, T. J. Casey and T. O. Lisk, all of Pecos, are the incorporators. The plant will be completed by June 1 and will have an annual capacity of 15,000 tons.

The Chamber of Commerce of Woodland, Yolo County, Cal., has purchased a site south of that place and will turn it over to the California Alfalfa Meal Milling Co., to construct and operate a mill for four months in the year, the deed to be given the milling concern at the end of five years. The concern reserves the right to purchase the property outright at any time within the five years at the cost price to the Chamber of Commerce.

Fearing that possibly President Taft might be compelled to put into force the maximum tariff against Canadian imports into the United States, buyers for the Boston and New York markets in March were active operators on Canada during the last fortnight of the month. One firm in New York purchased 100 cars of Canadian hay in one week for shipment to that market, and it is estimated by competent authorities in the trade that the United States took a thousand tons of hay per day out of Canada during the last half of January and in February and March and in that time the total quantity of Canadian hay shipped to the States was about 62,000 tons, aggregating in value fully \$868,000.

Receipts for the week of April 8, says the Pittsburg Hay and Grain Reporter, show quite a decrease, and at this writing tracks are well cleaned up with an active demand for all grades of hay. We believe, however, that there is enough hay enroute to prevent any marked improvement in values. We would again call attention to the fact that only a limited amount of hay of the clover types can be used at this season of the year, as feeders do not care to stock up with high priced goods that may have to be carried over until next season. Much of the straw that is coming is of very poor quality and off grade straw is hard to handle at prices that will cover more than freight charges. Good, sound, clean oats and wheat straw can be placed at quotations. Rye straw is dull.

The hay produced last year in Montana had a value of \$15,000,000, but that does not mean that the farmer secured that amount for it, says Prof. R. W. Clark of the State Agricultural College. "The greatest annual loss that the farmer has is in the way he handles the hay crop; and to place this loss at 25 per cent, or \$4,000,000, is very conservative. I have been over nearly the whole of Montana and have closely observed the quality of the hay produced. The farmers of the Gallatin valley produce as good hay as is produced anywhere in Montana and, in feeding some of this hay, I have found there is a very heavy loss. Hay should be cut at the proper time, cured properly and put into good stacks, well topped out and covered with material that will keep out water. The aim should be to produce less hay and take better care of it than has been the

practice heretofore. Better methods can and should be adopted."

CHANGES IN THE COMPOSITION OF UN-GROUND CEREALS DURING STORAGE.

Leavitt and Le Clerc analyzed the same samples of different cereal grains at intervals of six months, and found that corn loses about 80 per cent of its total sugar during twelve months' storage, unground corn about 60 per cent (2.16:0.36 per cent, or 0.76 per cent). The nitrogen compounds soluble in alcohol and in water also decreased to the extent of about 50 per cent in two years, though the total nitrogen remained practically unaltered, the proteids probably undergoing transformation into more complex molecules.

Wheat behaves in a similar manner with regard to the nitrogen compounds, though the decrease is smaller. The sugar in wheat usually behaves in quite a different manner to that in rye, a decrease being observed at the end of the first year, followed by a considerable increase. Oats behave like rye. In barley the proteids soluble in alcohol and in water show a tendency to diminish, and the total sugar decreases considerably. In the case of rye, proteids soluble in alcohol and in saline liquids diminish to merely a slight extent in one year, whereas those soluble in water decrease by about 50 per cent, the sugar content, however, remaining practically constant.

The sugar in cereals can be extracted to an equal extent by either boiling water or by a 0.2 per cent solution of sodium carbonate at room temperature. The germinative power of the grains suffers more or less alteration during storage, but the ash content, total nitrogen, and weight remain practically unaltered.—Journal of Industrial and Engineering Chemistry.

COTTON EXCHANGE DEALS PROPER.

A decision of distinct interest to members of the Cotton Exchange and to all persons interested in speculative transactions in cotton has been handed down by the Appellate Div. of the N. Y. Supreme Court in the First Department. It affirms a judgment of \$65,000 in favor of Springs & Co., cotton brokers of New York City, against David W. James, a banker and cotton raiser of Blakely, Ga. The opinion of the Appellate Division, which is unanimous, was written by Justice Clarke, and affirms the judgment entered below on the report of Edward G. Whitaker, referee. It holds that the Cotton Exchange is a legitimate exchange for the purchase and sale of cotton and that the transactions made for the defendant were not gambling transactions, as contended by his attorneys, but were in every respect proper and legitimate. It reviews at length the corporate powers of the Cotton Exchange and its by-laws and rules with reference to the delivery of cotton upon its contracts, and holds that it was necessary thereunder in all sales on the exchange for the party buying and selling to deliver the cotton unless the contract was settled prior to the date of its authority.

Spring & Co. sought to recover for moneys paid out for the defendant on transactions conducted on the New York Cotton Exchange. The defendant, Mr. James, defended upon the principal ground that the New York Cotton Exchange was a bucket shop and that the matters sued on were gambling transactions. On this point he contended that by offsetting those transactions under the rules of the exchange the plaintiffs were precluded from recovering. It was further claimed in behalf of the defendant that because of this method of offsetting one contract against the other on the Cotton Exchange Springs & Co. had not paid out any money for his account and could not recover.

The Appellate Division rejects this contention, and holds that the offsetting of one contract against a similar contract constitutes a payment, and that the clearing house of the Cotton Exchange is on the same basis as the Clearing House of the New York banks, it being as unnecessary for one broker, who has bought cotton from another and also sold cotton to such other broker, to make actual delivery of the cotton sold to that broker and then to receive from him cotton which he has purchased, as it is for the banks in New York City to "cart actual cash" back and forth between them.

The opinion is a complete vindication of the Cotton Exchange and of the legitimacy of the operations conducted under its rules, says the Journal of Commerce, and is particularly interesting in view of the recent controversies that have prevailed on these subjects and the ineffectual attacks from various quarters that have recently been made against the Cotton Exchange.

A car of corn was unloaded by the Armour Grain Company at Chicago on March 18, that contained 2,543.42 bu. It was bought from Van Ness & Co. and was shipped from Gardner, Ill.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

Right to Complete Skeleton Memorandum of Sale of Wheat with Oral Evidence.

In an action against a mill and elevator company for an alleged breach of contract, the plaintiff averred that the company purchased from him 2,500 bushels of wheat of a certain grade for \$1 per bushel. The contract was described as an oral one. The company's answer was that the plaintiff was the one in fault, the contract being in writing and stating that he had sold to the company "in the neighborhood of 5,000 bushels of wheat at \$1.00 per bushel, wheat to be sound and sweet and to test from 58 up, no wheat to be lower than 57, 57 wheat to be one cent less, to be delivered between October 23d and November 1st." Replying, the plaintiff admitted that he signed the writing, and alleged that it was made in part for the benefit of others; that it was incomplete; and that it was only part of an agreement, which, among other things, provided that the company would procure cars in which to ship the wheat and cause them to be set on a side track, but that the company had failed and refused to take any part of the wheat.

In affirming a judgment for the plaintiff, the Supreme Court of Kansas holds (*Heskett vs. Mill & Elevator Co.*, 105 Pacific Reporter, 432), that the facts set forth in the reply did not constitute what is termed in law a departure from the complaint. The grounds of recovery set forth in the plaintiff's petition were not enlarged by his reply. Embraced in the oral contract he set up was a brief, incomplete memorandum; but only one contract was involved.

Nor was there any ground for the complaint that testimony was received which varied or added to a written contract. It is true that the general rule is that oral evidence is not admissible to enlarge, vary or contradict a written contract. But this rule does not preclude oral proof of an independent, contemporaneous, oral contract which does not conflict with or contradict the written one; and where a written contract is ambiguous and open to two constructions, oral testimony of surrounding circumstances is admissible to show which construction should obtain.

Moreover, the general rule stated is not applicable to an obviously incomplete contract. If the writing is no more than a skeleton of an agreement, or if it is, as it was in this case, a brief, informal and manifestly incomplete memorandum, oral evidence, not inconsistent with the writing, showing the complete contract, may be received. Brief, informal memorandums of sale of this kind are not uncommon in the commercial world, and like receipts they do not purport to express the entire agreement; hence oral evidence is permissible to show the undertakings of both parties and the whole contract of which the memorandum is only a part. Proof that the wheat was to be delivered by the plaintiff at a certain station in cars to be procured by the company, but no cars were procured and the company failed to take and pay for the wheat as it had agreed to, did not contradict or conflict with the terms of the writing.

A Sale of Wheat Good as Against an Unrecorded Chattel Mortgage.

The case of *Fischbach vs. Garrison Milling and Elevator Co.*, 102 Pacific Reporter, 895, the Supreme Court of Colorado says, was brought to recover for the alleged conversion of certain wheat on which the plaintiff held an unrecorded chattel mortgage given by one Phillips. The plaintiffs' rights hinged upon the character of the transaction between Phillips and the company, by which the latter got the wheat—whether it was a sale or a bailment.

The pertinent facts were that the mortgagor, Phillips, caused the wheat to be threshed and delivered by his employees to the company at its mill and elevator. Before this he obtained from the company sacks in which to place the wheat after it was threshed and before it was transported to market, and their value was charged against him on its books. He gave his employees actual possession of the wheat as his agents, with ostensible power to sell it for his benefit. He never repudiated the sale or questioned their acts. There was not a particle of evidence that they did not have such authority from him, while the evidence tended to show that they had. Nor was there any evidence that they had violated his instructions. When they brought the wheat to the elevator the company's manager asked whose it was, and they replied that it belonged to Phillips. He then asked if it was for sale or storage, and their answer was that it was for sale. The wheat was then put into the company's elevator and mingled with other wheat which it had purchased. The amount of the wheat at the daily market price was placed as a credit to Phillips's account, against which there then stood as a debt the price of the bags. Up to this time the plaintiff had made no attempt to foreclose the mortgage

by taking possession of the wheat. More than two months afterwards the plaintiff, through his agent, made a demand on the company for the purchase price of the wheat and was refused.

The court considers that the evidence showed a sale and affirms a judgment for the company, the evidence being undisputed that it had no knowledge of the existence of the mortgage at the time it received the wheat. Certainly, the court says, something was intended by Phillips when he sent his men with the wheat to the company's mill and elevator. His agents said that it was for the purpose of sale. The company's manager supposed it was a sale, and it was so recorded in its books of account. The circumstance that the manager did not then fix the price was not material, in view of the evidence that there was a general custom in the valley—and it was a legitimate inference that Phillips knew of it—that grain which was delivered to and received at the elevator, unless at the time it was specifically stated that it was to be stored, was sold to the mill owners at the current market price for the day. There was not a word of evidence that there was any agreement or understanding between the parties that the company was to store this grain and redeliver it, or an equivalent amount, to Phillips upon demand, or otherwise account for it to the owner, except to pay the balance due on the purchase price. The transaction had none of the elements of a bailment, but on the contrary it had all the elements of a sale.

ARBITRATION DECISIONS.

Sec'y G. J. Gibbs of the Texas Grain Dealers' Association forwards the following arbitration decisions rendered by the committee of that Association at the March meeting:

Grayson Mill & Grain Co. vs. M. Bennett Grain Co.—[E. W. Crouch, E. M. Rogers and J. F. Wieser, Committee.—E. W. Rollow being interested and E. R. Kolp absent, E. M. Rogers and J. F. Wieser were appointed arbitrators in their stead.]

Claim filed before the arbitration committee of the Texas Grain Dealers' Association by Grayson Mill & Grain Co., of Van Alstyne, Texas, against M. Bennett Grain Co., of Houston, Texas. It appears from the testimony that on October 9, 1909, plaintiffs sold to defendants two cars No. 3 bulk corn at 75 cents delivered, Group 3 points, and for immediate shipment. Defendants confirmation specified 'Frisco origin and routed H. & T. C. south of first junction.

One car was shipped on which there is no controversy. However, the second car, A. T. 24239, was shipped from Ponca City and arrived in Houston via Santa Fe. There is much correspondence filed as to whether or not this car was shipped on time; but in the minds of the committee it is clearly established that the car was shipped and moving towards Houston within contract time. It further appears that in a letter written by the defendants to plaintiffs, and dated November 9, 1909, defendants took the car on contract, and without making exception to its Santa Fe delivery. This was after they knew of its arrival via Santa Fe instead of via H. & T. C.

After considerable correspondence between the parties, it appears that plaintiffs allowed defendants the sum of 2 cents per bushel on the corn, with the understanding that same should be submitted to arbitration; and this controversy arises from such agreement, the amount so allowed, and to be arbitrated, being \$23.53.

The committee finds that the car was shipped within the time specified in the contract; and further finds that defendants waived its right to demand corn of H. & T. C. delivery by accepting the car on the contract, as set forth in defendants' letter to plaintiffs, dated November 9, 1909, and as heretofore stated.

The defendants have also filed a counter claim for the sum of \$25.33, alleging same to be due for shortage resulting from cleaning a car of corn (T. & P. No. 7236), and shipped by plaintiffs to defendants October 11, 1909. It appears to the committee that defendants unloaded and cleaned said car without first obtaining the consent of plaintiffs, and rendered a bill for shortage and loss in cleaning. The plaintiffs paid the loss in weight before cleaning, but declined to pay the weight of the cleanings, or dirt, 1,892 pounds, and which amounted to \$25.33, based on the value of the corn delivered Houston. The committee holds that the defendants should have first obtained the consent of plaintiffs before so handling the corn, and, under the provisions of Trade Rule 36, declines to allow the defendants' counter claim of \$25.33.

The M. Bennett Grain Company is therefore ordered to pay promptly to Grayson Hill & Grain Company at Van Alstyne, Texas, the sum of \$23.53, and the secretary is directed to return plaintiffs' deposit fee.

John A. Rollow vs. W. S. Dement.—[E. R. Kolp, E. W. Crouch and I. Updike, committee.—E. W. Rollow being related to plaintiff, I. Updike served as arbitrator in his stead.]

Claim filed before the arbitration committee of the Texas Grain Dealers' Association by John A.

Rollow of Wynnewood, Okla., against W. S. Dement of Godley, Texas, wherein plaintiff seeks to recover \$88.15, difference in market value of 1,209 bushels of snap corn sold to defendant.

From the testimony it appears that the parties hereto entered into a contract on the 25th day of September, 1909, wherein plaintiff sold to defendant 5,000 bushels of river bottom snap corn at 65 cents per bushel of 72 pounds f. o. b. Wynnewood, shipper's sworn weights to govern. Both parties signed this memorandum, or contract. The plaintiff shipped in all 3,791 bushels on the contract, accompanying his drafts and invoices with sworn certificates of weight as provided in the contract.

The defendant complained that the corn was of inferior quality, not the sort sold, and that the corn was losing in weight at destination, and finally declined to receive more corn on the contract, and refused to give shipping instructions for the remaining 1,209 bushels. The plaintiff then sold the 1,209 bushels at 58 cents f. o. b. Wynnewood, and rendered a bill for his loss of 7 cents per bushel, including \$3.50 protest fees, amounting all told to \$88.15. The defendant in turn rendered a bill for shortage in weight on the corn shipped amounting to \$51.30; and the parties being unable to agree on a settlement, adjustment was referred to this committee.

There are numerous affidavits in the record as to quality, weight, etc., but we are of opinion that the plaintiff complied with his contract by furnishing shipper's sworn weights. It further appears that the plaintiff wrote the defendant to go ahead and receive the corn, and that he would do the right thing as to weights. In view of this fact, we will sustain the plaintiff's claim, but require that he stand one-half of the shortage claim.

The defendant, W. S. Dement, is therefore ordered to pay to John A. Rollow, promptly at Wynnewood, Okla., the sum of \$62.60, and the secretary is directed to return plaintiff's deposit fee.

The CO-OPERATIVES

The Farmers' Elevator at Tokio, N. D., has been closed.

The Farmers' Elevator Co. of Fenton, Ia. earned a profit of \$1,989.79 in 1909.

The Farmers' Grain and Coal Co. of Mason City, Ill., will reorganize with capital of \$25,000, being an increase of \$20,000.

The Farmers' Elevator Co. of Sidney, Ill., is in some trouble, a former manager having been short \$605 in his accounts. He was a "speculator."

The American Society of Equity will hold a convention at St. Louis on May 2-18, in an endeavor to swallow the Farmers' Union operating in the South.

Dividends: Farmers Mill and Grain Co., Milnor, N. D., 10%; Geddes Farmers' Elevator Co., Geddes, Ia., 40%; Beaman Elevator Co., Beaman, Ia., 5% and 20% to surplus.

The Farmers' Co-operative Co. of Fairmont, Minn. did a business in 1909 of \$78,336.09 with running expense of \$7,662.82. A dividend of 8% was voted, and a rebate of 6% to stockholders and 3% to non-stockholders on purchases.

The Farmers' Elevator Co. at Alta, Iowa, had a hot election of officers recently that caused some bitter feeling. The fight was made on the old officers because they had insisted that the proper mission of the elevator company was to buy grain and sell coal, while the element now in control is in favor of branching out into other lines of business.

The court at St. Cloud, Minn., on April 4, in the case of *Joseph H. Coates vs. the Stockholders of the Minnesota Farmers' Exchange*, ordered that an assessment be levied upon the stock at the rate of \$10 per share, the same to meet the liabilities of the insolvent company, including the cost of receivership. The Exchange was organized in 1904 for the purpose of handling grain at Minneapolis and Duluth. Capital stock in the amount of about \$2,000 was sold to about 1,500 farmers who again organized local branches, whose aim was to market their grain and that of others whom they could interest in the scheme. Business was transacted till 1908 when it was ascertained that the company was insolvent. Not only had the capital stock received from the sale of stocks been exhausted, but there was in addition an indebtedness of about \$9,000 with no cash to meet the obligations.

New Orleans in March exported 2,216,40 bu. of wheat and 273,827.48 bu. of corn, all of which went to the Continent of Europe.

Gustave and Caesar Schroeder, who composed the firm of Schroeder Bros., formerly dealers in ice, hay and feed in New York City, have filed a petition in bankruptcy with liabilities of \$2,717 and no assets. There are two judgments against them, one for \$1,493 for rent and another for \$843 in favor of Adolph Bennetti for damages for personal injuries. They gave up business as a firm three years ago.

IN THE COURTS

J. E. Flinn & Son, grain dealers of Converse, Ind., are made defendants in a suit on a note filed in the Circuit Court at Marion by the Farmers' State Bank of Converse.

Arthur F. Schicki, former bookkeeper of the Newmark Grain Co., Los Angeles, Cal., was recently found guilty of embezzling \$300 from his employers. He was arrested in New York.

George Theobald, Jr., & Co. recently filed a deed of assignment in the Insolvency Court in Cincinnati, Ohio. Assets are estimated at \$2,000 and liabilities \$4,000. The cause given is pressure of creditors.

Loring O. Smith, former manager and secretary of the Ohio Milling & Elevator Co., has been found guilty of embezzlement of the concerns funds by the Court in Marion, Ohio. The shortage is alleged to be over \$12,000.

Philip Boll of Stonington, Ill., was awarded a verdict of \$1,400 against the Stonington Farmers' Grain Co. for the loss of grain in a fire at the defendant's storehouse by a jury in the Circuit Court at Taylorville, Ill., recently.

Accusing the Chicago Board of Trade of violating the Sherman anti-trust law, Herbert E. Gooch, president of the H. E. Gooch Grain Co. of Lincoln, Neb., has filed an answer in the Federal Court of that city, asking that the writ of injunction requested by the Chicago men be denied.

Schedules in bankruptcy of Gurevitch & Lieberman, dealers in hay and grain in Mount Vernon, N. Y., show liabilities of \$3,441 and no assets. Among the creditors are the American Hay Co., Elizabeth, N. J., \$400; F. A. Champlain & Co., Newark, \$540; Charles Rockwell & Co., Mount Vernon, \$800; C. Rupert & Sons, \$525.

Frank Desmond has been discharged in bankruptcy by the Federal Court at Minneapolis, Minn., but similar petitions of M. C. Wright and G. A. Cannon have been denied. The three were doing business as the Traders' Grain Co., and the Court believes Messrs. Wright and Cannon tried to conceal the books of the concern from the trustee.

Actions for the dissolution of three grain companies have been commenced in the District Court of Minneapolis, Minn., by F. B. Wells, one of the executors of the estate of Frank H. Peavey. The concerns are the Montrose Mercantile Co., the Rubins Grain Co., and the Minnesota & Dakota Elevator Co. According to the petitions, all of these concerns have been inactive for many years. There are no debts so far as the petitioner is aware.

George W. Garner won in his recent \$10,000 suit against J. H. Pankey in Court at Los Angeles, Cal., to collect for a crop of grain raised on about 700 acres of land near San Pedro, Cal. The defendant, who was purchaser, contended that the land acreage was not as great as represented by Garner at the time the crop was sold. The court found that no guaranty as to acreage had been made and that the defendant could have measured the land before buying the crop.

C. H. Shaver of Carlton, Minn., has instituted suit in the District Court at Fergus Falls, Minn., against the Battle Lake Farmers' Elevator Co. of Battle Lake, Minn., to recover \$153.50. Mr. Shaver alleges that he contracted to purchase 2,500 bushels of oats from defendant concern at 35½ cents a bushel last fall and that the oats were not delivered. While he was awaiting delivery he asserts that the price advanced to such a figure that he was out the \$153.50 when he finally purchased elsewhere.

For the general creditors of the Hardy Grain Co. of Union City, Tenn., the Court has decided how the wheat funds should be applied. The Court holds that those who had certain grades of wheat in the elevator, such as No. 2, etc., would be paid in full for their claims as far as that particular grade should go, but no further, and the remaining fund of any one grade could not be applied to the wheat claims of another grade, but should be placed into the general fund for the other general creditors. The wheat depositors have been contending that they were entitled to all the wheat funds, no matter what particular grade of wheat from which they might come.

The Supreme Court of Texas in the case of J. E. Brussard et al. vs. the South Texas Rice Co. has granted the application of plaintiffs in error for writ of error, the case going up on appeal from the Court of Civil Appeals of the Fourth Supreme Judicial District of Texas, which had affirmed the judgment of the Sixtieth District Court of Jefferson County in favor of the South Texas Rice Co. The suit was originally instituted to recover an alleged balance of \$3,477 on 1,315 sacks of rice which the South Texas Rice Co. had delivered to the Beaumont Rice Mills, to be milled and sold, but which was destroyed by fire in the mill warehouse on October 30, 1906. It developed during the trial that the Beaumont Rice Mills had a blanket policy of insurance on all the rice in the warehouse on the date of the fire to the extent of about one-third the

value of same, and after the mill owners collected the insurance they paid the South Texas Rice Co. \$1,900, which was its pro rata share.

Elmer O. Kiddle, Omaha grain dealer, is made defendant in a suit instituted in the District Court of that city by Thomas Coleman for \$1,200. Of this sum \$700 is for grain sold to Kiddle & Droge, and the balance for a draft on Coleman, which the latter asserts Kiddle put through a bank at the time Kiddle owed Coleman the \$700 for grain.

The Gale Bros. Co. of Ohio has instituted suit in the United States Circuit Court at Baltimore, Md., against the Kirwan Bros.' Grain Co. of that city, urging that defendant concern be compelled to furnish a detailed statement of all expenditures in connection with twelve carloads of wheat shipped to it by plaintiff company. It is alleged that the wheat, amounting to \$14,354.54, was shipped in October and November, 1907, with instructions that it should not be sold, but placed in storage subject to the further order of the shippers. Orders were given to sell on February 11, 1909, at the then market price of \$1.17 a bushel. It is alleged the Kirwan company submitted to plaintiff company an account of sales in which it charged itself with the purchase of the wheat, amounting to \$14,354.54, and claimed credit for disbursements of \$4,053.78. It is further alleged that defendant company failed to furnish plaintiff company with the vouchers for the disbursements, except for freight and initial elevator charges.

NEW YORK OBJECTS.

The new shipping contract for domestic grain received here in the past few days from several Chicago shippers will not be accepted by members of the New York trade until it is greatly modified, says the New York Journal of Commerce. At a meeting of the cash grain trade on March 15 many objections to the new contract were raised and a committee appointed of L. A. Morey, A. C. Field, James Simpson, W. J. Brainard and Otto Keusch to handle the matter for the New York interests.

At the meeting yesterday it was pointed out that several of the clauses in the contract are impractical and unjust. One of these is that declaring margins on grain sold for shipment over 10 days. The New York members declared they would welcome a margin rule, but not necessarily one over 10 days. Another clause objected to is that giving the seller the right without further notice to cancel the contract or sell out the grain and charge the loss to the buyer if shipping instructions are not received immediately. The present rule gives the buyer three days in which to furnish shipping directions. To limit this time to immediately is looked upon as altogether unreasonable. A member of the trade said yesterday that under such a rule he would not even be able to call up his customers in the country, get directions and wire them to Chicago.

The local trade also believes that shipments should be 10 days from the time the instructions are filed with the broker, since there might be a question as to when the shipper actually received them.

Another clause which yesterday's meeting looked upon as extremely unjust is that by which the shipper has the right to delay shipment on account of a strike, lockout, fire, flood, etc. This is thought to afford too big a temptation to the shipper facing a loss.

The terms in full of the new contract are as follows:

Chicago weights and grades to govern.

Payment by demand draft with documents attached.

It shall be the duty of the buyer to furnish shipping directions immediately or upon request of the seller, and if the buyer fails to furnish directions, in accordance with this agreement, the seller reserves the right, without further notice to the buyer, to cancel the contract, charging loss, if any, to the buyer, or to sell same for the buyer's account.

This transaction is made under the rules, regulations and customs of the Board of Trade of the city of Chicago. Any claims or differences to be settled under rules and regulations of the Board of Trade of the city of Chicago, in Chicago.

Shipping terms are defined by the Chicago Board of Trade as follows:

Immediate shipment shall mean within three business days at place of shipment.

Quick shipments shall mean within five business days at place of shipment.

Prompt shipment shall mean within ten business days at place of shipment.

Excluding the date of sale, time of shipment shall be figured from date full shipping directions are received at Chicago, and shall not include Sundays or legal holidays at place of shipment.

Sale of purchase of grain for which shipment or delivery may extend beyond ten (10) days from date of contract, to be subject to the "Rules Governing Cash Margin Calls" as printed on back hereof.

This contract subject to conditions over which the seller has no control, such as strikes, lockouts, boycotts, fire and floods. Manifest errors excepted.

PERSONAL

O. C. Morben has taken charge of an elevator in Loma, N. D.

A. N. Galland is the new manager of the elevator in Pisgah, Iowa.

H. D. Beach is now manager for the Andrews Elevator Co., in Milnor, N. D.

Gordon Taylor has been appointed agent for the Red Lake Falls Elevator in St. Vincent, Minn.

F. R. Gabert will buy grain in Stratford, S. D., for the Ferney Farmers' Elevator Co. of Ferney, S. D.

Harry Rasmussen has succeeded A. W. Kingsley as manager of the Western Elevator in Briceyn, Minn.

T. Nelson has succeeded N. M. Nelson as agent for the Homestead Elevator in Callaway, Becker County, Minn.

A. Belcourt will be manager for the Farmers' Elevator Co. in Grand Harbor, Ramsey County, N. D., this year.

H. J. Weaver, former proprietor of the Weaver Elevators in Gallon, Ohio, contemplates moving to Twin City, Idaho.

Walter Ball, who has been in the grain business in Galva, Iowa, for some years, is now located in Sac City, Iowa.

Arthur L. Brundage has succeeded J. R. Elsey as manager of the Homestead Elevator in Forada, Douglas County, Minn.

A. H. Benson has succeeded J. E. Fridgen as agent for the Occident Elevator Co. in Pingree, Stutsman County, N. D.

James B. Bridges, former grain dealer, and wife celebrated their silver wedding anniversary in South Deerfield, Mass., recently.

The Bowen & Regur Elevators in Blanden, near Manson, Iowa, are now in charge of P. R. and V. F. Frazier of Nevada, Iowa.

Fred Swanberg has resigned as buyer for the Cargill Elevator Co., in Cokato, Minn. The structure will be closed temporarily.

U. G. Mills, who has been conducting the elevator in Tipton, Ill., has been engaged by the St. Joseph Grain Co., St. Joseph, Ill., as manager.

Henry Lewis has severed his connections with the Finch Elevator in Verona, N. D., and has been engaged as buyer by the Andrews-Gage Elevator.

The stockholders of the Eastern Montana Elevator Co. recently held a meeting and elected G. D. Hollecker president and George W. Haskell secretary.

Ephraim Propst has succeeded Bloom Ramsey as manager of the Farmers' Elevator in Greenview, Ill. J. J. Henry has become assistant manager.

D. M. Cash, formerly with the Johnson Elevator Co. in Logansport, Ind., is now connected with McLain, Swift & Co., Cash Grain Co., Battle Creek, Mich.

Henning Lundeen has severed his connections with the Homestead Elevator in Westbury, Becker County, Minn., and is now agent for the Farmers' Elevator in Audubon, Minn.

Henry B. Budd, for more than twenty years agent for the St. Anthony & Dakota Elevator Co. in Beltrami, Minn., has departed with his family for Gleichen, Canada, to reside.

Frank Pouzar has severed his connection with the Atlantic Elevator Co. in Lankin, Walsh County, N. D., and is at present officiating as buyer for the Farmers' Elevator Co. at that point.

O. F. Bast, who for five years has been agent for the Atlantic Elevator Co. in Lintonville, Kandiyoki County, Minn., has resigned to become manager of a Farmers' Co-Operative Store in Lane, S. D.

George C. Barland has succeeded J. H. Phelps as manager of the Victoria Elevator in White Earth, Ward County, N. D. The former has had charge of the Victoria Elevator Co.'s elevator in Minot, N. D., for the past four years.

George Walker, agent for the Cargill Co.'s Elevator in Langdon, N. D., and O. W. Simonson, in a similar position with the St. Anthony & Dakota Co., at that place, have resigned, and will depart with their families for their homesteads in Eastern Montana. Tom Pelkington will have charge of the latter elevator.

John A. Costello has been reappointed grain inspector at South Bend, Ind. He is an appointee of the circuit court, as provided by Indiana law.

The Pacific Brewing & Malting Co. of Tacoma, Wash., have taken out a permit for the erection of a six-story brick malt house, 100x126 feet, and a six-story elevator and grain house. The malt house will cost \$50,000 and the elevator and grain warehouse \$10,000.

FIRES-CASUALTIES

The elevator of Nelson, Lund & Co., in Grove City, Minn., was destroyed by fire April 5.

Fire slightly damaged the contents of the compartment warehouse of D. C. Gay in Winchester, Ky., recently.

J. T. Scroggs' Elevator in Hawarden, Iowa, was destroyed by fire April 7. Loss on building \$3,000; on contents \$1,000.

The Western Elevator in Sulphur Springs, Buena Vista County, Iowa, was destroyed by fire recently. Loss about \$7,000.

Fire of unknown origin destroyed the Clark, Travis & Co.'s Grain Elevator in Mesick, Mich., March 21. Loss \$22,000.

A spark from a locomotive started a fire that slightly damaged the elevator of Boston & McClelland in Dwight, Ill., recently.

One grain elevator was included in a disastrous fire that did damage to the extent of \$50,000 in Lebanon, Potter County, S. D., March 26.

Friction in a clutch at the foot of a grain spout started a fire in the Williams Elevator in Webster, S. D., recently, which was soon extinguished.

The elevator owned by J. W. Shaffer in Vanburen, Ohio, was destroyed by a fire, believed to have been caused by a spark from a locomotive, recently.

The grain elevator of Smith & Pitzer in Bucyrus, Ohio, was slightly damaged by a fire, probably started from a spark from a locomotive, recently.

The Security elevator at Crocker, Clark county, S. D., was destroyed by fire recently. About 3,000 bushels of grain were consumed. The loss was \$25,000.

The Dominion Elevator in Moosomin, Sask., was destroyed by fire of unknown origin, March 30. About 15,000 bushels of wheat, oats and barley were destroyed.

Fire starting from an unknown cause in the Diamond Elevator in Olathe, Kan., communicated to other structures and resulted in a total loss of about \$50,000.

Fire of unknown origin destroyed the Cargill Elevator in New London Junction, Wis., April 7. About 2,500 bushels of grain and 800 bushels of potatoes were destroyed.

The Duluth elevator in Maxbass, N. D., was destroyed by fire recently, entailing a heavy loss. There was much grain in the elevator. The cause of the fire is unknown.

The Winter-Trusedale-Ames Co. suffered a slight loss to their elevator in Kloten, Nelson county, N. D., as the result of the destruction by fire of the old Heising elevator nearby.

The Great Western elevator at Jessie, Griggs County, N. D., was destroyed by fire of unknown origin recently, entailing a loss of \$6,000. It contained 25,000 bushels of wheat.

Fire of unknown origin destroyed the Spencer elevator in Quincy, Ill., March 30; also five carloads of wheat, rye, flax, oats and barley. Loss between \$10,000 and \$12,000, covered by insurance.

The elevator of Kell & Son in Lindsay, Okla., was destroyed by fire March 4, resulting in a loss of about \$15,000, partly covered by insurance. The structure contained 10,000 bushels of corn.

The big elevator of the Gilbert Grain Co., at Gilbert, Story County, Iowa, containing about 8,000 bushels of wheat, was destroyed by fire March 31, resulting in a loss of about \$10,000, well covered by insurance.

Fire caused by spontaneous combustion destroyed the Olson Elevator in Des Lacs, Ward County, N. D., March 28. It was owned by an independent concern. The loss is total. There was little grain in the elevator.

A spark from a locomotive set fire to some hay outside a grain elevator in Glengarry, Fergus County, Mont., recently, and but for the good work of firemen from Lewistown a destructive blaze might have resulted.

The R. C. Parks Elevator at Kirksville, Ill., containing 3,000 bushels of oats and corn, was destroyed by fire recently. The elevator was valued at \$6,000, with \$4,000 insurance. The grain was covered by insurance.

Fire of unknown origin destroyed the elevator in Florence, Wright County, Iowa, owned by the Iowa Elevator Co., of Fort Dodge, recently. Loss about \$2,500. There were no fire fighting facilities and the structure burned rapidly.

Fire starting from a locomotive spark destroyed the grain elevator of Dowling & Purcell in North Bend, Neb., March 23, and also consumed a number of other buildings, causing a total loss of \$25,000 and threatening the entire town.

A spark from a locomotive is believed to have started a fire that destroyed the old Whitney elevator in Aurelia, Iowa, recently. The local fire company succeeded in saving adjoining elevators after a hard fight. The Whitney elevator contained

machinery and lumber valued at \$500. There was no insurance.

The Canadian Elevator Co.'s elevator at Gilbert Plains, Man., was destroyed by fire March 25. The structure had a capacity of 30,000 bushels and from 12,000 to 15,000 bushels of grain were destroyed. The origin of the fire is a mystery.

While attempting to straighten the smokestack at the Cleveland Grain Co.'s Elevator in Farmer City, Ill., recently it was disconnected from a guy wire and fell to the ground, breaking in several places and knocking down the cob-chute.

The Farmers' Union warehouse at Mansfield, Ore., containing 35,000 bushels of wheat collapsed recently and about 18,000 bushels spilled into a pond. The foundation of the warehouse was undermined by the construction of a new railroad grade.

The elevator in Milbank, S. D., owned by the Reliance Elevator Co. of Minneapolis, was destroyed by fire March 30. It contained about 5,000 bushels of grain. The estimated loss is \$10,000. Because of a heavy rain spread of the fire was prevented.

Fire that started in a building adjoining in Dallas, Texas, destroyed that plant and also the plant of the Texas Grain & Milling Co., recently. The latter concern's loss is \$1,500, covered by insurance.

The Dominion Elevator in Rosthern, Sask., was destroyed by fire, March 30. About 5,000 bushels of wheat valued at \$4,000 were destroyed. The elevator was of 10,000 bushels capacity and valued at \$3,200. Building and contents were partly insured.

The grain elevator at Britton, seven miles north of Oklahoma City, Okla., caught fire recently following the explosion of a gas engine and was totally destroyed. It contained 2,450 bushels of grain and the loss was about 4,500. The engineer had a narrow escape.

Several cars of a freight train left the tracks and plunged into the McBall & Selmser elevator at Thomas, Hamlin county, S. D., recently, tearing the structure from its foundation. The coal sheds and flour house adjoining were wrecked. The damage was \$1,500.

Fire believed to have been of incendiary origin destroyed the large elevator in Pisgah, Morgan County, Ill., April 4. The building was owned by Calhoun & Curry, of Franklin, Ill., and contained 20,000 bushels of corn. The loss is about \$20,000, with \$16,000 insurance.

Sparks from a B. & O. engine are believed to have started a fire that destroyed the Travis, Emick B. & O. Elevator in Hamler, Ohio, March 28. Loss on building and contents was about \$16,000, with about \$12,000 insurance. Firemen had a hard time saving nearby structures.

Fire of unknown origin destroyed the elevator of the Farmers' Milling & Grain Co., in Mattoon, Ill., April 1, causing a loss of \$10,000. An adjoining warehouse containing much flour was saved by the determined efforts of the firemen. The loss is partly covered by insurance.

Fire probably of incendiary origin destroyed the elevator and warehouse formerly used by the Golden Milling Co., in Golden, Colo., March 20. The loss is \$9,000, with no insurance. The building, which had been unoccupied for several months, was owned by W. L. Cookman.

The Farmers' elevator in Barlow, N. D., was destroyed by a fire recently which originated from an overheated box near the top of the building. The structure contained 85,000 bushels of grain. The elevator was valued at \$8,000. It is likely it will be rebuilt for the fall business.

Fire of mysterious origin destroyed the Farmers' Elevator in Madison, S. D., March 24, with contents. The structure cost \$8,500 and was insured for \$6,000. The grain was insured for an equal amount. About three years ago the old building burned in a much similar manner.

Fire, supposed to have been caused by friction of the machinery, destroyed the Scott Elevator at Dalny, five miles west of Waskada, Man., April 4. It contained 12,000 bushels of wheat. The loss is about \$8,000, well covered by insurance. The Lake of the Woods Elevator was endangered.

The old factory in Saugus Center, Essex County, Mass., used by Ernest Butler as a storehouse for hay and grain, was destroyed by a fire believed to have been of incendiary origin, March 26. The loss was \$1,000. The Lynn Gas & Electric Co., building adjoining suffered a loss of \$300.

Fire originating in one of the cob houses and caused by a spark from a locomotive destroyed the large grain elevator of Z. H. Travis & Co., in Holgate, Ohio, recently. There were about three car loads of grain in the building. Building and machinery were insured for \$6,500 and there was some insurance on the grain.

Fire which originated in the old part of the elevator of the Central Granaries Co.'s plant in Holdrege, Neb., March 23, destroyed that structure, causing a loss of \$150,000 and also destroyed a number of other buildings. The flames were fanned by a brisk south wind, which rendered it impos-

sible for the volunteer firemen to combat them. The loss on the elevator and contents is well covered by insurance.

Fire believed to have started from a spark from a locomotive destroyed the Turner-Hudnut Elevator in Kilbourne, Ill., March 23. Loss about \$18,000, partly covered by insurance. About 15,000 bushels of grain were in the elevator. A large string of cribs filled with ear corn caught fire. A bucket brigade assisted in fighting the flames.

Fire caused by a hot box destroyed the elevator mill and office of the New Ulm Roller Mill Co., New Ulm, Minn., March 19, resulting in a loss of about \$75,000, with \$65,500 insurance. The loss to the elevator was \$15,000. While in the midst of the fire Dr. L. A. Fritche, part owner of the mill, became confused and had a narrow escape.

The warehouse of the Western Grain Co., in Birmingham, Ala., was destroyed by a fire caused, it is believed, by a spark from a locomotive, April 2. The loss is estimated at \$50,000, fully insured. The building was filled with baled hay and from the start the fire was beyond control. The structure was of rough siding lumber with iron roof.

The big elevator of the Burge Milling Co., in Sweetser, Ind., containing 2,000 bushels of grain, was destroyed by a fire caused by a spark from a locomotive April 5. Because of the absence of an organized fire department citizens fought the flames with buckets of water and garden hose. Insurance was about \$2,000. The fire broke out in the roof of the engine room.

A bucket brigade numbering three hundred fought a fire that destroyed the big grain elevator of Finch & Morrison in Stockwell, twelve miles south of Lafayette, Ind., March 28. The fire started in the cob bin and ran up one dust spout into the elevator proper. The elevator contained about 8,000 bushels of wheat, oats and corn. The loss is about \$15,000. The insurance was \$10,000. The elevator was recently remodeled.

The ironclad grain elevator one and one-half stories high, and warehouse owned by A. B. Crouch in Temple, Texas, was destroyed by fire March 26. Much shelled corn, bran and other feedstuff was consumed. It is believed that defective electric wiring was responsible for the fire. All the machinery was ruined. Loss \$10,000, with \$6,500 insurance. The business of the Crouch Grain Co. suffers no interruption, as the plant destroyed was one of four operated by the concern in Temple.

For the second time within less than a month the W. H. Gardner Grain & Mill Co., of Bellevue, Ohio, suffered a loss by fire April 1, when their elevator at Colby, Sandusky County, Ohio, was destroyed. The fire originated from an explosion of a gasoline supply tank. The loss is about \$15,000. J. D. Castle, the engineer, had a narrow escape. The elevator will undoubtedly be rebuilt. A mill and elevator owned by the concern in Norwalk, Ohio, were destroyed by fire a few weeks ago. These are also likely to be rebuilt.

Fire starting in the Nye-Schneider-Fowler Grain Elevator in Omaha, Neb., the night of April 3 destroyed those structures, entailing a loss of \$400,000, also caused a loss of \$285,000 to the Maney Milling Co., threatened the Independent Elevator owned by the Chicago Great Western railroad and did a total damage of about \$700,000. The water supply was inadequate and there was a strong wind. How the fire started has not been determined. The Nye-Schneider-Fowler Grain Co.'s insurance on building was \$181,000 and \$210,000 on grain.

The big alfalfa meal mill of the Roswell Wool & Hide Co., Roswell, N. M., was damaged to the extent of \$15,000 the night of March 26 by a fire which started around an outside stairway and ran up a telephone pole to a wooden meal elevator which carried meal across an angle of the building. The fire outside was soon extinguished, but after the fire department had left flames were discovered in the interior of the structure. Two hundred tons of hay ready for grinding were ruined. The cost of the building and equipment was \$42,000. The loss is fully covered by insurance.

Charles F. Partridge, retired wholesale flour merchant and member of the New York Produce Exchange, passed away recently at his home in Brooklyn, N. Y.

C. C. Crowell of Blair, Neb., president of the Crowell Lumber & Grain Co. of Omaha, and prominent throughout Nebraska as a prohibitionist and philanthropist, died recently in Los Angeles, Cal., where he had gone for his health. Physicians have not been able to determine the cause of death. He had been in ill health about five years. Decedent was born in East Dennis, Mass., in 1844 and had resided in Nebraska over forty years. He was the pioneer in the lumber and grain business in Nebraska. In 1885 he merged his various lumber and grain houses into the Crowell Lumber & Grain Co. Recently, when he departed for California for his health, he gave his \$60,000 residence in Blair to the Methodist church as a home for superannuated preachers. Decedent is survived by his widow, two daughters and three sons.

CROP REPORTS

The Kentucky April crop report shows condition of wheat 94.

The Wall Street Journal estimates that about 110,000,000 acres of corn will be planted this year.

The first crop report of the season issued by the Chicago & Northwestern railroad states that the early season in Minnesota will be a good thing for crops.

President Dorsey of the Texas Grain Dealers' Association, asserts that the recent rains in that state will give a wheat crop for 1910 of 10,000,000 bushels.

The Missouri April crop report shows 31 per cent of the corn land has been plowed and 26 per cent of the last crop still on hand. Oat acreage sown 90 per cent, but it is estimated that the total will be 111 per cent of last year. Wheat condition 67.5.

Final reports on the wheat situation in Kansas show that approximately 1,000,000 acres of wheat were killed by the cold of the past winter and another 1,000,000 acres were so badly damaged that they are either being plowed up and sowed in oats or corn or are of doubtful value as to wheat production.

Secretary Barrett of the Oklahoma Board of Agriculture denies reports that the Oklahoma wheat crop is seriously damaged. His recent report shows that the condition of wheat is fully up to the standard of March 1, when its condition was 91.1. From many sections of the state 100 per cent reports have been received.

The Ohio April crop report makes wheat condition 83, but Snow's recent report made it 86. Last April the condition was only 62, but afterward improved to 77 and the crop was 27,000,000 bushels. The April report states that 4,376,000 bushels remain in producers' hands, against 3,000,000 a year ago. Condition of corn in crib 90, against 98 a year ago.

S. W. Strong, Secretary of the Illinois Grain Dealers' Association, recently returned from a trip through ten counties between Springfield, East St. Louis and the Illinois river. He found conditions worse from Whitehall to Beardstown, fully 50 per cent of the wheat being dead. He estimates wheat is damaged 20 per cent and is in bad condition for want of rain.

The Michigan April crop report shows only slight decline since last December and makes the condition 12 per cent better than last April. It improved last season to 82 in June and the crop turned out 12,000,000 by the State report and 15,000,000 by the Government. Farm reserves there now are estimated at half million less than a year ago. Rye condition 92, against 83 a year ago. Rye output 5,500,000 bushels.

The Ohio Department of Agriculture report for April 1 shows the condition of wheat compared with standard average 83 per cent and crop of 1909 still in producers' hands 16 per cent. The condition of corn in crib compared with standard average is 95 per cent; the amount remained unhusked during the winter, 10 per cent, and damage to unhusked during the winter 12 per cent. The condition of rye is 88 per cent and winter barley 88 per cent.

The Van Dusen-Harrington Co., of Minneapolis reports that there has never been a month of March so favorable for spring work in Minnesota and the two Dakotas as the last. The frost in the ground thawed with the first warm days. Plowing and seeding in many instances commenced March 15. Many farmers have delayed field work on account of fear of a return of cold weather. The soil is reported to be in first class condition everywhere. The prospects are that there will be an increase of wheat acreage over that of last year.

B. W. Snow's crop report, based upon country returns at the end of March, makes the condition of winter wheat 81.3 per cent, against 81.8 a year ago. The condition reported last December was 96.2 per cent, showing a winter loss of 15 points. The present condition is reported for the acreage. The loss of acreage from winter killing cannot be definitely determined, but it is heavy in Kansas, very material in Nebraska and Missouri, and more than usual in Illinois, Indiana and Michigan. The reports show the present condition of remaining wheat in Ohio as 56; Indiana, 63; Illinois, 81; Missouri, 75; Nebraska, 74; Kansas, 67.

The Department of Agriculture estimates that the average condition of winter wheat on April 1 was 80.8 per cent of a normal, against 82.2 on April 1, 1909, 91.3 on April 1, 1908 and 87 the average condition for the past ten years on April 1. The decline in condition from December 1, 1909, to April 1, 1910, was 15 points, as compared with an average decline in the past ten years of 4.5 points. The crop indicated by the figures is 473,700,000 bushels, compared with a promise of 424,000,000 bushels a year ago, and a final yield estimated at 446,000,000 bushels. The greatest losses in condi-

tion were in Kansas, Nebraska and Missouri. Winter killing was the cause. East of the Mississippi conditions were found to be about normal, while in Oklahoma, Kansas and on the Pacific coast the outlook is promising and make up to a large degree for the poor prospects elsewhere. Condition of rye was estimated at 92.3, against 87.2 a year ago and a ten year average of 89.5. The indicated rye crop is 34,695,000 bushels, based on the acreage of 2,155,000 as given by the Government in December last. The rye crop harvested last year was 32,239,000 bushels from 2,006,000 acres.

MICHIGAN'S CROP REPORT.

The Michigan State Crop Report is prepared by the Secretary of State, who is authorized to spend \$150 a year for the purpose but as he has over 1,100 correspondents keeping him informed, he has not any too much money to pay stationery expenses of making the reports. This army of correspondents receives no remuneration from the state aside from receiving the report when issued, and various agricultural reports from the secretary of state's office and pamphlets issued by the M. A. C.

All reports are tabulated by clerks in the agricultural department, and advance copies for newspapers are ready for distribution about the 8th of the month. Nearly seven hundred newspapers are sent copies and later, about the 20th of the month, copies to the number of about 3,500 are sent to farmers, crop correspondents and business men. Nearly 90 per cent of the reports, however, go to farmers.

The state follows out the same rule about as does the Government in obtaining its reports; in fact, it is said that the Government relies much on the state reports, although it has a large corps of correspondents of its own.

Different subjects are treated at various seasons of the year. For instance, the February report dealt much with the present condition of wheat, relative to the damage done by the winter. Next follows the condition of fruit buds, and in their turn the planting of corn, oats, etc., are taken up, showing the acreage planted and the condition later of the crops.

The report follows these crops up to the time of threshing, at which time the yield is shown, and when reports are completed it can be easily shown the relative yield of almost all crops compared with the year before.

THE BUCKET SHOP CAMPAIGN.

Attorney General Wickersham has begun a Federal campaign against "bucket shops," which promises to be effective.

State attacks on this evil have accomplished little. New York, in 1858, repealed its act against short sales, and it was not until 1887 that legislation began again. It was not until 1906 that District Attorney Jerome began his futile campaign under the Canfield law. The Pennsylvania statute against such "sales" has done little. Arkansas, in 1883, secured a conviction, and in 1887 the Kentucky Court of Appeals defined the offense of the "bucket shop" by drawing the sharp distinction between regular exchange transactions and those where "it is understood between the customer and the shop that there is no actual deal in grain" and no machinery for making any delivery.

"This," said the Court, "shows it to be a species of gambling as well defined and as reprehensible as that of keeping a faro bank." Other state courts of last resort have reached similar decisions, and in Michigan a short statute directly extends the laws against gambling to "bucket shops," "under whatever name the same may be transacted."

For twenty years past agitation and legislation have gone on. In 1901 the new internal revenue tax was expected to end the business by making the payment of the Federal tax imposed on sales and futures proof that the State laws were violated. In 1900 the Chicago Board of Trade sought to cut off grain quotations from "bucket shops," and finally won. This ended a profitable business extending over twenty-five years. But valid quotations are as unnecessary to the bucket shop as real lottery drawings are to policy. "Mining" quotations, wholly fictitious, both mine and quotation, are furnished to bucket shops and bets made on them.

The chain of establishments attacked by Attorney General Wickersham has used actual quotations. The Federal statute, however, is rigorous, and in spite of past failures the present prosecution attacks this great evil on a new count, under the statute prohibiting frauds in the mails.—*Philadelphia Press*.

In Michigan, thanks to the State Railroad Commission's refusal to endorse the Demurrage Code, concessions have been made as to methods employed in collecting average demurrage that have ended all cause for dissatisfaction and the rules will now be complied with.

OBITUARY

J. H. Brown, president of the Iowa Farmers' Grain Dealers' Association and a leader in the co-operative elevator movement, passed away in Rockwell City, Iowa, recently.

P. O. Talle, manager of the Farmers' Elevator in Lankin, N. D., passed away recently as a result of complications. The remains were buried in Kenyon, Minn., decedent's former home.

Mrs. Cargill, widow of the late W. W. Cargill, who was one of the most prominent grain dealers in the Northwest, died recently in La Crosse, Wis., of heart failure. Since the death of her husband Mrs. Cargill had failed rapidly.

Conrad Dieterle, for twenty years connected with the grain firm of Carson, Craig & Co., Detroit, Mich., passed away recently in that city rather suddenly. Decedent was born in Germany and had been a resident of Detroit for forty years.

Thomas F. McMahon, official reporter of the wheat pit and an employee of the Chicago Board of Trade for twenty-five years, died recently at his home in that city of heart disease, aged 46 years. The Board of Trade adopted resolutions lamenting his death.

Alfred O. Gamble, well known to old members of the Chicago Board of Trade, who was identified with the milling and grain business in Attica and Lafayette, Ind., for years, died recently in Chicago as the result of a complication of diseases. He was born in Lincolnshire, Eng., seventy-four years ago.

E. T. Woodcock, prominent grain merchant of Urbana, Ohio, died at his home in that city recently, after a brief illness. For thirty-five years he had operated the same grain elevator at that place. Decedent was born in Independence, N. Y., and is survived by his widow, two daughters and three brothers. The remains were buried in Wellsville, N. Y.

Everett P. Wilber, grain commission merchant of Buffalo, N. Y., for many years, died in that city recently as the result of stomach trouble. Decedent was born in Batavia, N. Y., sixty-three years ago and came to Buffalo when seventeen years old. At the age of thirty-four he engaged in the grain business. He is survived by his widow, one son and four daughters.

Thomas F. Burroughs, senior member of the firm of Thomas F. Burroughs, Son & Co., grain and feed dealers of Alexandria, W. Va., died recently at his home in that city, following a brief illness of pneumonia, aged 73 years. Decedent was born in Charles County, Mich., and had been engaged in business in Alexandria for forty years, and was a member of the Royal Arcanum.

Dickson Cunningham, retired grain broker, was found dead in the bathroom of his home in St. Louis, Mo., recently. Death is attributed to heart and kidney ailments. Decedent was born in Ireland seventy-one years ago and was graduated from Trinity College, Dublin. He came to America in 1861 and became a member of the St. Louis Merchants' Exchange in 1865. He was twice married and is survived by one daughter and two sons.

William F. Johnson, member of the Chicago Board of Trade since 1856, died suddenly in that city recently, aged 76 years. He was found dead in bed after retiring the previous evening in his usual good health. He retired from active business in 1906. Decedent was born in New York state in 1834 and in 1855 came to Morrison, Ill., where he engaged in the grain business. In 1905 he sold his interest in the business to his partner, M. H. Potter. He married in 1859 and is survived by his widow and two daughters.

Nels and C. W. Olsen, brothers, who were in a partnership brokerage business in Kansas City, Mo., are believed to have ended their own lives as the result of financial reverses suffered on the Board of Trade. The bodies were found on the bank of the Missouri river near Kansas City. In the hand of one of the men was a revolver containing two empty shells. The brothers are said to have lost between \$75,000 and \$100,000 as a result of their operations on the Board of Trade. They formerly operated a brokerage office in Sylvia, Kan.

Ward Ames, Sr., member of the Ames-Brooks Co., grain exporters of Duluth, Minn., died at his home in that city recently of typhoid fever, aged 63 years. He organized the Ames-Brooks Co. of Duluth and Winnipeg and was also a member of the Ames-Brooks Barnes Co. of New York. He was a pioneer member of the Duluth Board of Trade. He had just returned from Washington, where he had attended a conference of grain exchange interests with Agricultural Committees having in charge the anti-futures bill. Decedent was born in Oswego, N. Y., attended Phillips Academy and soon thereafter engaged in the elevator and milling business. In 1881 he went to Fargo, N. D., and engaged in the agricultural implement business, later going to Duluth, to engage in the grain business. He was also identified with Duluth philanthropic work. Decedent is survived by his widow and two children.

TRANSPORTATION

Lake navigation will open today, April 15. The Welland Canal also will open today.

Shippers of all sorts at Kansas City, Mo., have subscribed \$1,100,000 to finance a line of freight boats on the Missouri River, operating from that city.

Manager G. W. Sanford of the Chicago demurrage bureau notifies the grain trade that time will be computed against cars delayed by extra-legal holidays, like Good Friday, etc., as only legal holidays are recognized.

These propositions caused not a little discussion in the Commercial Exchange, and while some directors were rather insistent that the real facts are not as Mr. Neall stated them in his report, there was some opinion that they would have to be taken up; but the directors decided to turn the matter over to the transportation committee of the Exchange, who will investigate.

The Boston & Maine, Boston & Albany and New York Central have published via both these routes, rates on export grain for the summer season from Buffalo to Boston (and to New York via other lines) effective May 1 as follows, reducing wheat from 5½ to 4c. per bu.; corn, from 4½ to 3½c.; rye, from 5½ to 3½c.; barley, from 4½ to 3½c.; oats, from 3.7 to 3c. These rates will be met by the Canadian lines to Montreal.

The Chicago Board of Trade Transportation Department notifies members as follows in regard to switching charges of belt lines on grain from the Illinois Central Railroad delivered to the Lake Shore and Michigan Southern Railway and Pennsylvania Company: The Illinois Central Railroad now advises that it will make free delivery to such Eastern roads and absorb Belt Lines' switching; also refund will be made of charges that have already been paid on such grain.

The "Clover Leaf" (T., St. L. & W.) will on April 18 put into effect the following rule: "On grain, flaxseed and hay, in carload lots, for which reconsigning orders are received within 48 hours from 7 a. m. of day of arrival, Sundays and legal holidays excepted, no additional charge will be made, provided cars have not been placed for delivery. If reconsigning orders are received after the free time specified above, or after cars have been placed for delivery, a reconsigning charge of \$2 per car will be made."

The trunk lines have made a differential rate on Canadian grain moving in bond to the Eastern seaboard points and quoted a rate thereon from 1 to 1.5 cents lower than other grain moving in bond. The new rates will become effective May 1. The rate on wheat from Buffalo to New York will be 5 cents, whereas the Canadian wheat will be 4 cents. Similar variations are quoted on corn, rye, barley, oats and flaxseed. The chief part of this traffic goes to New York, Boston, Philadelphia and Baltimore.

The Commerce Commission has promulgated no "transit" rules, as a result of the recent investigation; and Commissioner Clark, writing on this question to E. J. Lachmann, secretary of the Wisconsin Millers' Association, says there is no probability that the Commission will undertake to pass on the legality of transit regulations in general or lay down any informal rules, or determine where the privilege may be granted. As conditions vary at different points no uniform rules would be practicable; and the Commission will only undertake to enforce compliance with the law.

In his argument in the Senate for the "administration" railroad bill, which would control the issue of stock, Mr. Root among other things said: "Why, I remember when several gentlemen in Ohio organized a railroad, issued to themselves bonds to the value of \$8,000,000 on nothing at all, and then sold the stock. For years after that the public had to pay in tolls interest on those bonds that stood for nothing, while the innocent and ignorant stockholders also had to subordinate their interests to those of the bondholders. I believe that the provisions in this bill when enacted into law will look to a better service, to better terms for railway securities and to lower charges."

The grain trade of the Chamber of Commerce and the Cincinnati railroads are engaged in a conflict just now over a peculiar condition, which to the grain trade is both annoying and costly. This complaint is this, that grain is always sold as sample, and when it is shipped into this market, the car is inspected by an official inspector of the Chamber of Commerce, who takes a sample to 'Change, where it is graded and turned over to the consignee. The railroads have been in the habit of furnishing the inspector with the identifying numbers of the cars received. This facilitates the work of the inspector, who must be on the floor of 'Change at noon. Recently, the C. H. & D. and the B. & O. have not been giving the inspectors a complete list, with the result that cars are overlooked, causing a day's delay in marketing of the grain. This is bad enough,

but to make it worse, the railroads assess the \$1 a day demurrage, even for the day thus lost. The trouble, cost and annoyance can all be avoided if the railroads will but furnish the inspector with a complete and accurate list of grain arrivals, for of course, grain inspectors have no right to break open freight cars in search of grain.

The Commerce Commission on March 28 ordered a reduction of lake-and-rail rates on flour. Minneapolis to Seaboard from 23c. to not to exceed 21½c. In announcing its decision in the flour millers' case, the Commission refused to give any relief to the Chicago millers or grain dealers other than that afforded by the reduction of the Minneapolis rate. The Chicago Board of Trade intervened in the case and demanded a readjustment of the rates from Minneapolis to Chicago and from Buffalo to the Seaboard. Both these changes were declared to be vital to the prosperity of the Chicago flour and grain interests, but the Commission states it cannot pass on either of the points in the present case.

The Iowa Railroad Commission, on a petition for a Class B rate on seed grains, etc., said: "The Board has grave doubts about its authority to make different rates for different classes of seed grain, seed corn and seed potatoes, and is of the opinion that it will be difficult, if not impossible, to provide a method of inspection for determining the different grades. The Board is of the opinion that at this time it would not be warranted in making an absolute order in the premises. The Board suggests that the railroads devise some method for a rate of 50 per cent of the regular rates for the distribution of seed grain, seed corn and seed potatoes, and the Board advises the railroads to make this rate."

A new grain carload minimum of 300,000 lbs. has been adopted and promulgated by the Texas Railroad Commission, effective March 31, except on oats and grain products, straight or mixed, 28,000 lbs.; on "snap corn," 24,000 lbs.; on hay and articles taking hay rates—cars 32 feet and less in length, internal measurements, 14,000 lbs.; cars 34 feet and over 32 feet, 15,000 lbs.; cars 36 feet and over 34 feet, 16,000 lbs.; cars over 36 feet, 17,000 lbs. On mixed cars of hay and articles taking hay rates with other articles covered by tariff, 24,000 lbs., provided the proportion of articles taking hay rates amounts to 25 per cent of the shipment; if less than 25 per cent the higher minimum to govern. On other mixed cars (other than oats and grain products) the lowest minimum will govern, provided the proportion of the article taking the lowest minimum amounts to 25 per cent of the shipment; if less than 25 per cent the higher minimum will be used. When mixed carload shipments do not contain the prescribed minimum the weight of the lot taking the lowest rate shall be increased to make up the deficiency. All minimums shall be subject to marked capacity of car used.

NEBRASKA SWITCH ACT KILLED.

The U. S. Supreme Court on April 4 declared unconstitutional the Nebraska act requiring railroads on request to build switches to all grain elevators along their lines. In the Nebraska case Justice Holmes asserted that although the state possessed certain police powers and that railroads must fulfill the purposes for which their charters were granted, yet, he added, "railroads, like other owners of property, have rights that are protected by the Constitution." He held their property could not be taken without compensation, as he said the law proposed to do in requiring the roads to build switches to elevators in question.

DISCRIMINATION AGAINST PHILADELPHIA.

Frank L. Neall recently made a report on railway discrimination against Philadelphia in favor of New York by the Pennsylvania Railroad, in which he said:

"The Pennsylvania Railroad Co. can exact a grain elevator charge of ¾c. per bushel, say \$1,500, on a single tramp steamer cargo of wheat at Philadelphia, when, had the identical wheat been carried on through Philadelphia to New York for export per tramp steamer, the Company would not only have made no elevator charge on the New York wheat but would itself have handled the grain through her elevator at New York and expended 1c. per bushel, say \$2,000, in elevating and lightering same, and herself absorb this cost.

"The Pennsylvania Railroad Co. will haul 200,000 bushels ex-lake wheat from Erie to Philadelphia (441 miles) for 5.2c. per bushel freight and then haul it through Philadelphia on to New York (90 miles) at an additional charge of 0.3c. per bushel, say 12c. per ton, or \$600, for the lot. When this parcel of grain reaches New York harbor, the Pennsylvania Railroad Co. will spend 1c. per bushel, 37c. per ton, or \$2,000 on the lot, in putting the grain through its New York elevator and delivering it alongside tramp steamer, and itself absorb the cost."

Send us the grain news of your neighborhood.

[From B. P. I. Circular 55.]

RELATIVE WORTH OF GRAIN ON A DRY-MATTER BASIS.

In Circular 55 of the Bureau of Plant Industry, Crop Technologist John D. Shanahan and his assistants, C. E. Leighty and Emil G. Boerner, print the table below as a guide to a better understanding of the relative values of commercial corn upon a dry-matter basis. This table shows the comparative values of the dry-matter content of grain containing from 12 to 25 per cent of moisture, inclusive, and at prices ranging from 40 cents to \$1 per unit of measure, that is, per bushel hundredweight, etc. The comparative values as shown in this table, as well as the principle upon which they are based, will apply equally well to all grains, although the air-dry basis of other grains is likely to be found slightly lower in moisture than that of corn.

HOW TO USE THE DRY-MATTER BASIS.

Through the use of this table the relative value of the dry-matter content of grain containing various quantities of moisture may be quickly ascertained. Thus, if grain containing 12 per cent of moisture is worth .40 cents per bushel (or other

RELATIVE WORTH of grain on a dry matter basis, showing the price per unit of measure from 40 cents to \$1, and the difference in value for each 1 per cent of moisture from 12 to 25 per cent.

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storage and transportation purposes.* It will also be noted that the difference in value per each 1 per cent of dry matter increases in direct proportion to the increase in the price, so that as the prices of grain increase the differences in value per each 1 per cent of dry matter or of moisture become of more material importance to the producer and consumer of grain. These greater differences in actual value in the higher priced grain are sufficient to reimburse the producer or seller for the cost of reducing the moisture content of the grain and to enable the consumer to purchase it at the increased cost, provided the grain is bought and sold on a basis of its dry-matter content.

SUGGESTIONS RELATIVE TO GRADING CORN.

The results of these investigations so far as they have progressed, indicate that commercial corn, in order to fix its intrinsic worth as nearly as possible by grades, should be divided into at least two classes: (1) To include only well-matured and well-developed corn containing not more than 2½ per cent of field or mold damaged kernels, and (2) to include the ordinary sorts of commercial corn containing not more than 5 to 6 per cent of field-damaged kernels (commercial basis, heat-damaged or "mahogany" kernels excluded),† regardless of the moisture content of the corn, that each of the suggested classes be subdivided into grades based upon the moisture content of the corn, that no one grade should contain a greater range than 2 per cent of moisture,‡ and that no corn should be graded, shipped long distances, put into storage, or exported on grades unless it be commercially clean and free from indications of fermentation.

The necessity for some arrangement of this kind in the grading of corn and for more care in the methods of handling corn becomes more apparent as the prices and values of grain continue to increase, and as they continue to increase the advisability of still narrower limits of moisture within the grades will become more apparent.

*It is confidently hoped that the investigations now being carried on by the Office of Grain Standardization will throw some light upon the ratio of increased risk to increased moisture in commercial grains for storage and transportation purposes.

†The analyses of samples taken from various cargoes of corn, representing approximately 4½ million bushels of all grades exported from the United States during November and December, 1908, and February, March, April, and October, 1909, showed a maximum of 10.2 per cent (December, 1908), a minimum of 2 per cent, and an average of about 2.5 per cent of field and mold damaged kernels. The maximum of 10.2 per cent was unusual and undesirable. It is the opinion of the writers that corn containing more than 5 to 6 per cent of such damaged kernels and also corn containing heat-damaged or "mahogany" kernels, should be bought and sold "on samples" or on special grades.

‡Bulletin 99, Bureau of Plant Industry, U. S. Dept. of Agriculture, describes the Brown and Duvel apparatus for and method of making moisture determinations in grain quickly. The apparatus has been recommended by the Department of Agriculture and is extensively used in the grain trade for the purpose.

KINGHEAD WHEAT.

The large increase in the amount of wheat containing kingheads that was raised on the past crop has resulted in more of this class of grain being received at Duluth than the market can properly handle. Considerable of it has been grading No. 1 Northern with a dockage presumably sufficient to

cover the removal of the above weed, yet they cannot be taken out by elevator machinery, and as a result our contract grade is more or less affected. The terminal elevators can under the most favorable circumstances handle a very small percentage of this class of grain, and if they take all that is tendered on purchases to arrive the next crop, as they were compelled to do the past season, it would mean that they would have considerable stocks on hand that would be practically unsalable.

It has therefore been decided by the buyers representing the various elevator interests at Duluth that on and after August 1st, 1910, any purchases of wheat to arrive which they may make shall be understood to mean wheat free from kingheads even though the cars should grade No. 1 Northern. All wheat containing kingheads will be bought on its merits regardless of the state grade or dockage, but under no circumstances will any of the cars be applied on sales that have been made to arrive by the various receivers.—Duluth Market Record.

FACTS AND FIGURES

Buffalo reports a "deluge" of net corn, that has broken the record both for quantity and dampness.

For the eight months ended with February, 1910, Portland, Ore., stood second to New York as an exporter of wheat.

In studying the causes of high living prices in Utah, the grain and commission dealers of Salt Lake City made a guess that one cause is the policy of the railways. As soon as the grain harvest is ready, they fall into line with a rate of 30 to 35 cents on wheat into Colorado, for shipment to Colorado and Texas points. With this encouragement, there is a general emptying of bins, too dangerously near the margin of safety. Then in the spring, when the market threatens to run short of flour, the railroads charge 56 cents per hundred from Missouri river points to Utah. This of course sends flour up to abnormal figures, for which the consumer has to suffer. If this condition could be reversed, and high rates made to prevail in the fall, so much of the local wheat supply would be retained at home as to bring about more reasonable local prices.

A. G. McBean has been appointed chief inspector of grain and hay for the Eastern Division of Canada with office at Montreal. The matter of "cattle feed inspection" has been a cause of some differences at Montreal, owing to the fact that the inspector rejected some feed offered by a local shipper at a time when he was acting as representative of the cattle exporters. At the annual meeting of the Corn Exchange the committee of management discussed the matter, the annual report stating that the circumstances of the inspection of hay and cattle feed had led to representations being made on the subject to the Department of Trade and Commerce. It was agreed that while a properly constituted feed inspection office under the department, with duly authorized standards, would be an advantage to the trade, the committee was of the opinion that the present system, whereby the inspector of hay inspects cattle feed without authority, was a most objectionable one. At that time the hope was expressed that the department would place the inspection on a legal basis, with properly chosen standards, or that the unauthorized inspection be put a stop to, but the department replied that while the inspector of hay had no authority from it to inspect cattle feed, the department had no power to stop him from continuing such inspection.

Philadelphia has won out in the "diversion" controversy, the Pennsylvania, P. & R., and B. & O. and Lehigh Valley Roads on April 1, having agreed to a new arrangement that materially modifies the \$2 per car demurrage charge. In effect the four carriers agree, as soon as they can file notice with the Interstate Commerce Commission, to grant grain shippers 24 hours' free time at reconsigning points. Under present conditions grain men are compelled to pay \$2 for every car held at diverting points at Buffalo or Altoona. Even should the car be detained only an hour the charge is levied. Under the new arrangement the carriers will make no charge for holding cars at reconsigning points, and have agreed to give shippers ample notice as soon as cars arrive, so that they may have an opportunity to take advantage of the 24-hour limit. This concession, if carried out to the letter by the railroads, will mean a saving to grain men of more than \$200,000 a year, the shipper has been compelled to bear. The general complaint in the past has been that the carriers failed to notify shippers promptly on the arrival of their cars, thereby preventing grain men from sending in reconsigning orders before cars reached diverting points. This defect the carriers have promised to rectify and have agreed that to facilitate the rapid movement of grain shipments, to have their representatives on the floor of the Philadelphia Commercial Exchange on Saturdays.

There Are Two Kinds of Ellis Grain Driers

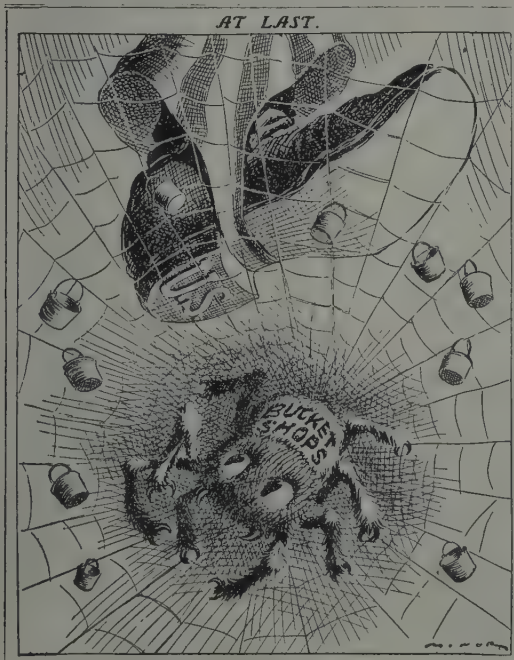
Hot Air Machines, with capacities of from 50 to 2,000 bushels per hour, handling the poorest grades of damp grain.

Cold Air Driers and Conditioners, with capacities from 100 to 4,000 bushels per hour. They are the most successful machines in the world for raising the grade and improving the carrying qualities of all classes of grain.

The Ellis Drier Co.

Postal Telegraph Bldg.

Chicago



—St. Louis Paper.

LATE PATENTS

Issued on March 8, 1910.

Conveyor Mechanism.—Jacob Mussell, Caldwell, Idaho. Filed December 18, 1908. No. 951,738. See cut.

Grain Door.—John A. King, Chicago, Ill. Filed October 26, 1908. No. 951,281. See cut.

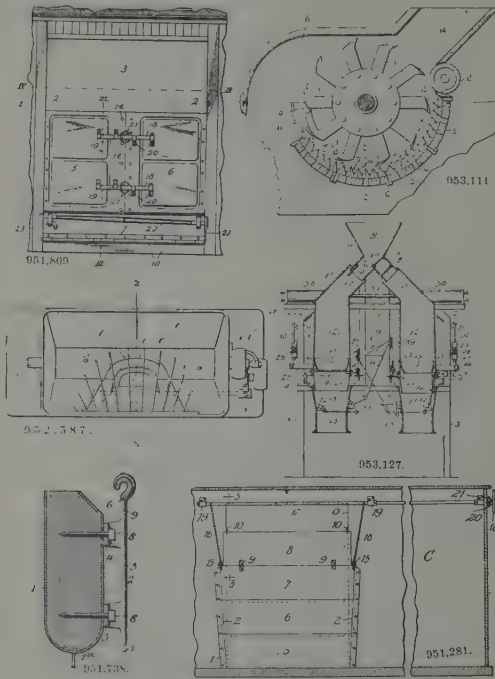
Grain Polisher and Cleaner.—Isidor Steiner, Munich, Germany, assignor to Gesellschaft fur Steiner's, Malz-Entkeimungs-Putz und-Poliermaschinen mit beschränkter Haftung, Munich, Germany. Filed July 20, 1909. No. 951,549.

Issued on March 15, 1910.

Grain-Car Door.—James E. Faucett, Kenmare, N. D., assignor of one-half to Martin H. Pelton, Kenmare, N. D. Filed March 31, 1909. No. 952,319.

Grain-Door for Cars.—Cyrus O. French, Kansas City, Mo., assignor to Bender Car Door Company, a corporation of Arizona. Filed March 29, 1907. No. 951,809. See cut.

Portable Grain Bin.—Emanuel E. Norquist, Kansas City, Mo. Filed August 12, 1908. No. 952,133.



Drum for Malting or Drying Grain or the like.—Bjarne Nissen, Christiania, Norway. Filed February 11, 1909. No. 951,835.

Grain Sieve.—George W. Welfelt, Chicago, Ill. Filed July 6, 1908. No. 952,288.

Issued on March 22, 1910.

Feed Regular.—Mark Durst, Marcus, Iowa. Filed May 14, 1909. No. 952,562.

Automatic Weighing Apparatus.—Andrew Sonander, Springfield, Ohio, assignor to The Winters-Coleman Scale Company, Springfield, Ohio. Filed April 20, 1909. No. 952,587. See cut.

Issued on March 20, 1910.

Grain-Car Door.—Orblin Van Camp, St. Thomas, N. D. Filed April 5, 1909. No. 953,244.

Hopper Scale.—Harry Dunkerly, Houston, Texas. Filed April 10, 1909. No. 953,177. See cut.

Cage for Shredding-Machines.—Milton F. Williams, St. Louis, Mo., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo. Filed November 4, 1908. No. 953,111. See cut.

Judge Kohlsaat on March 15 refused a permanent injunction restraining the Chicago railroads from putting into effect new rules with respect to the demurrage on grain cars, says the Record Herald. The ground assigned by the court for his refusal was the lack of permanent and irreparable injury to the complainants. The court did, however, retain jurisdiction of the case in order to enforce any order that may be issued by the interstate commerce commission. The rules as now in force, therefore, allow twenty-four hours for disposition of grain from the first 7 a. m. after inspection and forty-eight hours for the unloading of grain after it has been set at the place for unloading. Attention has been directed to the fact that the new rules are in some cases being applied by the carriers based upon the arrival of grain here. The proper date to be used is the date of origin in the country, and demurrage charges should therefore be based upon the old rules upon presentation of proper evi-

dence that the grain was shipped prior to the effective date of the new rules. These rules being unsatisfactory to the grain trade, the whole question is "up to" the Interstate Commerce Commission. The new rules reduce the free time after arrival twenty-four hours and also an additional twenty-four hours from the unloading time after delivery at elevators. These rules are especially stringent when considered in connection with service rendered by the railroads—particularly the very poor and unsatisfactory service given their patrons the last three months. It has been said that, "The Chicago carriers are agreeable to the grain men having more free time if the Commission and the court decide they are entitled to it."

[From the "Railroad Age Gazettee."]

HANDLING GRAIN IN SACKS IN THE PACIFIC NORTHWEST.

BY SAMUEL O. DUNN,

Western Editorial Manager, Railroad Age Gazettee.

While the system of handling grain in bulk through elevators has become almost the only method used in the Middle West, the system of handling it in sacks has grown up and is still the prevalent method in the extreme Northwest. There the farmer sacks his grain in the field when it is threshed, and it is hauled in sacks to a flat warehouse at the country station instead of to an elevator. It is also hauled in sacks by rail, and when it reaches the large markets on the Pacific seaboard, it is put into large flat warehouses in sacks. Some of these warehouses have a capacity of as much as 2,000,000 bushels.

Before the Northern Pacific was built to Puget Sound all grain docks in the Northwest and the ground occupied by them were private property. When the Northern Pacific reached Tacoma its officers considered it necessary, in order that it might get its share of the grain business, to build its own warehouses, and it did so and leased them to private firms that were in a position to give it traffic. Competition between the Northern Pacific at Tacoma and the Oregon Railroad & Navigation Company at Portland caused the latter to lease water front property belonging to it at Portland to grain concerns. Competition compelled the Great Northern to make similar terms with concerns at Seattle and Everett. No grain warehouses have been built in Portland or on Puget Sound with private capital since the railways thus interested themselves in the business, although a number that were there before are still there and in operation.

There has been a prolonged controversy in the Northwest over the question whether or not the introduction of bulk shipments into that territory would be to the advantage of all concerned. About a year ago W. H. Reed, of Tacoma, Wash., a member of the Washington State Grain Commission, wrote an open letter in which he presented the case in favor of the adoption of bulk shipments. He argued that the cost of shipping wheat in bulk from the threshing machine to Liverpool would be less than is the cost of shipping it in sacks and that in the long run the farmer, if bulk shipment were adopted, would gain the difference in cost. At the threshing machine in sacking there is a "sack jigger" who is paid \$3 a day and two sack sewers who are paid \$4.50 each per day, making \$12 a day. If 2,300 bushels be threshed in a day, the wages of these men aggregate ½ cent per bushel. This expense, Mr. Reed pointed out, would be avoided if the wheat were run from the thresher spout into a galvanized iron or steel tank or bin at each sitting. The farmer could then store his crop on his place until he got ready to sell. He would have no insurance to pay on the grain because it could not burn in the tanks and there would be no possibility of damage to it by stock getting into the field and tearing the sacks. The field could be used for feeding stock as soon as the thresher pulled out. There would be no damage by rain before hauling, which could be done at any time when teams and men were not required for other work. By handling the grain in this way, he contended, the farmer would save 1½ cents a bushel. He could mix his grain in his own bins and profit an addition 1½ cents a bushel on that which was light weight. It would cost him less to load his wagons with bulk than with sack grain, and a wagon load of bulk grain could be dumped and weighed at the elevator in five minutes, whereas to unload sack grain requires a great deal more time.

The aggregate saving up to this point would be 3½ cents a bushel. The farmer gets at the station 3 cents a bushel more for his wheat in sacks than in bulk and his sack costs him a little more than 3 cents a bushel; so it seems possible, Mr. Reed argued, for him to handle the grain to the station about 3½ cents a bushel cheaper in bulk than in sacks. Mr. Reed also said that the loading of a 1,000-bushel car of sacked grain at the country warehouse takes two men two hours, while it can be loaded in bulk by one man in five minutes. The railway freight on bulk grain is the same as on

sacked grain; in other words, the transportation of the sack has to be paid for at the same rate as the transportation of the grain. At tidewater it takes 12 men, including the weigher, one hour to unload and pile a car of 1,000 bushels in sacks. In bulk three men can sweep out a car, unload the grain and bin it in from 5 to 10 minutes. It takes 15 men four and a half days of eight hours each to load a vessel with 125,000 bushels of sacked grain. In bulk the same quantity of grain can be loaded in three or four hours by one-half as many men. Mr. Reed contended that all of the extra expenses involved in the handling of grain in sacks—including the freight that must be paid on the sacks—must ultimately come out of the pocket of the farmer, who, because of these extra expenses, gets a lower price for his crop than he would if it were shipped in bulk. He said that the real reason why the grain merchants on the Pacific coast continue to argue in favor of the continued handling of wheat in sacks is that they know that the introduction of the bulk system would destroy the value of their large warehouses. He predicted that the Chicago, Milwaukee & St. Paul and other new roads that are building into Washington would build elevators on their lines and force the exporters to handle grain in bulk.

GRAIN FOR EXPORT.

While some railway officers who have investigated the subject regard the argument in favor of bulk handling as conclusive, others think that there is much to be said in favor of handling in sacks. The main reason, undoubtedly, why the system of handling in sacks has held its own is that a very large proportion of the grain grown in the Northwest is exported to Europe and Asia. The amount exported fluctuates greatly from year to year according to the size of the yield, the Oriental market for grain and the proportion of the total crop absorbed by the flour mills and the proportion taken by the flour mills depending upon the condition of the export flour trade, particularly to the Orient. Six years ago it was believed that the export shipments of wheat from the Northwest would soon become unimportant and that the entire part of the crop exported would be converted into flour before leaving North Pacific ports; but these expectations were disappointed. There was a large increase in the production of wheat in Manchuria and a heavy decline in the flour trade to China. Japan adopted a tariff to protect Japanese millers. Large additions were made to the Russian and Japanese milling capacity. The consequence in 1907 was a large increase of export shipments of wheat as compared with export shipments of flour. The indications are that plans for the future handling of the crop of Washington, Oregon and Idaho should provide for the probable exportation of 50 per cent of the surplus crop in the form of wheat.

Now, the wheat exporters on the coast do not favor bulk shipments by sea or bulk handling of wheat from the country railway stations to terminals. Grain making the long voyage from the North Pacific coast to Europe must cross the equator twice, and it is claimed that when shipped in bulk it will heat and reach Liverpool in bad condition. In answer to this it is stated on good authority that there has been no actual trial of bulk wheat shipments from the Pacific coast to Europe via Cape Horn. The Northern Pacific Elevator Company made a partial experiment twenty years ago when it loaded ten sailing ships, but only one-third of the cargo was in bulk owing to rules of the underwriters. The advocates of bulk shipments contend that steamships could carry bulk wheat and get it to Europe in good condition if it were perfectly dry when loaded, and that the underwriters would, under proper conditions, modify their rules so as to permit such shipments.

Another objection to bulk shipments is that so many varieties of wheat are grown in the Northwest—eight distinct varieties being produced in eastern Washington alone—that it is impossible to make a full cargo of any one kind. This objection could be overcome only by reducing through some means the number of kinds grown. It is claimed that Pacific coast smut is much worse than eastern smut, and that smut balls are easily broken in bulk handling and cannot be blown out in the original cleaning process on farms or at country stations. The farmer, however, can get rid of it if he will use methods prescribed by experts.

The exporters claim that the necessary investment in elevators both at country station and terminal points is so much greater than in the flat warehouses that they could not successfully compete with the flat warehouses unless the railways charged a higher freight rate on sacked wheat, in which event the net return to the farmer would be decreased. The farmer, it is argued, pays from 6 to 10 cents for a sack that will hold two bushels of grain. He can get 2½ to 3 cents per bushel more for wheat in sacks at country stations than for wheat in bulk. Consequently he pays not more than 2½ cents per bushel for the use of a sack and often less. It is claimed that in order to save this he could not afford to provide necessary facilities for bulk handling and pay the higher storage

charges to which bulk wheat stored at country stations would be subject.

BULK SHIPMENT VERSUS SACK SHIPMENT.

The average crop of wheat of a farmer in the Pacific Northwest is 10,000 bushels; tank wagons, capacity 100 bushels, cost \$20 each; a granary with a capacity of 10,000 bushels, about \$250. The investment for bulk handling on the farm is, therefore, not large. But scarcity of labor and teams in harvest time prevents the same saving in cost that is made by eastern farmers who haul directly from the threshing machine to the receiving elevator. It is estimated by defenders of shipment in sacks that it would cost a Washington farmer 1 or 2 cents a bushel more to put wheat in his granary, and haul it later to the station, etc., than to sack it, pile it in the threshing field, protected from stock by a temporary fence and by straw from the weather, and leave it there until it is convenient to haul it.

Country storage rates in the far Northwest are now 50 cents per ton to January 1 and 10 cents per ton per month thereafter. The storage rates of elevators in Minnesota and the Dakotas are 1 cent per bushel per month for the first three months and one-half a cent per bushel per month thereafter. On account of bad winter roads wheat must be hauled in a large part of the Northwest before December 1 or after April 1, and therefore the need for large storage facilities at country stations is greater than in the more easterly states, and the higher storage rate on bulk grain would be felt more in the Northwest than farther east.

One of the strongest objections urged against bulk shipments is that they would endanger the boats in which they were exported. It is said that even under the present system of stowing grain in sacks and securing it by boards to prevent it from shifting to one side of the boat in a heavy sea in a manner impossible with bulk grain, no season passes without some of the grain fleet being damaged or lost through the shifting of the cargo in the heavy seas met in the vicinity of Cape Horn. It is argued that the seas encountered by ships carrying grain from the Pacific coast to Europe are so much heavier than any encountered by vessels carrying grain in bulk from the Atlantic coast to Europe that it cannot be assumed, because bulk shipments from the Atlantic seaboard are successful, that such shipments from the Pacific coast are feasible.

From the railway standpoint, the handling of grain in sacks has one great advantage. Bulk grain must be handled in box cars, while all kinds of freight cars are available for sack shipments. The railways in the Northwest have sometimes hauled as much as 30 per cent of the entire crop in flat cars and stock cars. As many of the flat cars that are used to haul lumber shipments eastward might but for the sack grain shipments have to go westward empty, the claims against the railways for damage to grain hauled in open cars are usually small, it is said, compared with the saving in cost of operation.

Owing to the comparatively low rates of storage in the Northwest and the fact that the farmers are uncommonly prosperous and have a tendency to speculate with their wheat, the proportion of sales immediately after harvest is less than in states farther east. In consequence, the movement of the grain to market after harvest is much less rapid than in such states as Minnesota, the Dakotas and Kansas. The result is that the railways in the Northwest find that the congestion of traffic caused by the movement of grain on the western part of their lines is usually less in the fall than on the eastern part. They have, in consequence, been able, as already indicated, to a large extent to adjust the westward movement of grain to the westward movement of otherwise empty cars for lumber.

The arguments of those who contend that handling grain in sacks is best adapted to the conditions and needs of the Northwest have thus far been sustained by the logic of experience. The number of elevators in that section has increased substantially within recent years. The late F. H. Peavey some years ago built numerous fine elevators at important wheat shipping points in Oregon and Washington on the Harriman Lines. The number of elevators on the Northern Pacific west of Spokane is gradually increasing, having grown from four in 1902, with a capacity of 190,000 bushels, to seventeen in 1907, with a capacity of 667,000 bushels. In 1906 and 1907 the Farmers' Grain & Supply Company, a co-operative concern, built several elevators on this road; but it seems that no great progress has been made in getting farmers to adopt bulk shipments. During the season of 1906 one elevator concern built a number of wagon tanks, the use of which it furnished free to the farmers. It also paid them for bulk grain within 2½ cents per bushel as much as they could get for sacked grain. In this way it succeeded in getting a considerable quantity of bulk grain. But the next season the farmers went back to sacks. Even the concerns that handle large quantities of grain through elevators receive a large proportion of it in sacks.

The forty to fifty elevators at points on the Oregon Railroad & Navigation Company which were

built by F. H. Peavey & Company, and which are now owned by the Pacific Coast Elevator Company, are, it is said, being operated satisfactorily both to their owners and to the railway on whose lines they are. It seems to be the judgment of experts that ultimately grain will be handled in bulk to Pacific coast terminals as it is to other large terminal points, but this will involve such a complete revolution in the methods of farmers and grain merchants that if it is ever brought about it will be accomplished only gradually.

THE TOWNSEND BILL.

The Townsend railroad bill was reported to the House on April 1. It makes a number of radical changes in the Hepburn act of 1906.

It would give the Commerce Commission jurisdiction over foreign commerce as well as interstate; it creates a Commerce Court; and enlarges the jurisdiction of the Commerce Commission so far as the control over rates is concerned. The bill would give the Commission jurisdiction to enter orders not only in regard to rates, but also in regard to classifications, regulations and practices, whether they affect rates or not, and to determine what such rates and practices should be. Carriers would be required to observe and follow the rate which may be fixed by the Commission. The Commission also is given mandatory power to establish through routes and rates, except in instances where a shipment originates and ends on a water carrier line entirely. Stock watering is forbidden.

The bill further prohibits a carrier "from receiving greater compensation for a shorter than for a longer distance over the same line in the same direction, the shorter being included within the long distance, or to receive a greater compensation as a through route than the aggregate of the local rates;" and it allows the shipper to specify over what routes his property shall move. Carriers heretofore have routed freight without positive dictation from the shipper.

Other important amendments to the present law are those preventing the director of one railroad corporation being the director of a competing carrier; prohibiting a carrier from acquiring stock in a competing railroad or water carrier line unless specific admission be given by the Commerce Commission after due application is made, making water-carrier lines engaged in interstate commerce subject to the act, and forbidding them from acquiring an interest in a competing water carrier or railroad lines.

While the Commission is authorized to allow rate agreements between carrier, no agreement for the pooling of earnings can be made.

The Commission may of its own volition initiate inquiries into rates and may suspend rates for 120 days during the investigation.

The bill provides a heavy penalty for false damage claims, which may be employed to evade the anti-rebate law.

In proceedings before the Commerce Court of five judges, appointed from the Circuit Judges of the United States, the Attorney General rather than the Interstate Commerce Commission shall conduct the prosecutions.

COMMERCE COMMISSION RULINGS.

In *Henderson Elevator Co. and A. Waller & Co. both vs. Ill. Central R. R. Co.* (opinion 1155), the Commission award reparation on the following state of facts: "During a part of 1906 defendant, by provisions in its tariffs, applied to the transportation from Omaha, Nebr., and Council Bluffs, Iowa, to Cairo and other Ohio River crossings of grain placed in elevators at the latter points and reshipped thence to southeastern destinations proportional rates less than the local rates paid from said points of origin to said destinations, but no such transit privilege was allowed at Henderson, Ky.; Held, That failure to allow the proportional rate and transit privilege at Henderson unlawfully discriminated against complainants' business at that point."

In *E. Clements Hoist Co. v. S. P. Ry. Co. et al.* (Op. 1156), reparation is denied. The complainant shipped from Port Costa, Cal., to Sacramento, Cal., three carloads of barley, intending if the barley met certain requirements on inspection and sampling at Sacramento, to forward it to Milwaukee, Wis. The shipments were consigned to complainant's representative at Sacramento, who sampled them. None of the barley was removed, and the cars were forwarded within four days from the date they reached Sacramento. The through rate from Port Costa to Milwaukee was 50 cents per 100 pounds, but complainant paid the local rate from Port Costa to Sacramento of 7 cents per 100 pounds, and the rate from Sacramento to Milwaukee of 50 cents per 100 pounds. Reparation was asked in the sum representing the amount paid above the through rate from Port Costa to Milwaukee.

The local charge from Port Costa to Sacramento was paid by complainant to the local agent of the Southern Pacific at San Francisco subsequent to

the shipment from Sacramento. At the time the shipment moved the Southern Pacific had no provision in its tariff permitting the diversion of grain in transit through Sacramento, such diversion was permitted, however, without publication. Such a provision is now effective, having been published January 1, 1909, but reparation cannot be allowed on a billing not authorized.

In *Commercial Club of Omaha vs. S. P. Co. et al.* (Op. 1178), the Commission, passing on a complaint of unreasonable rate, say in substance: "Without renewing the discussion of the question, fully considered in other cases, as to which side has the burden of proof in a proceeding attacking the reasonableness of an increased rate, it is clear that an order granting affirmative relief, and particularly in a case in which reparation is awarded, must be predicated on a definite conviction drawn from the record or from the Commission's own investigation, or from both, that the rate exacted on the shipments complained of was an unreasonable rate."

In *Maldonado & Co. vs. Ferrocarril de Sonora et al.* (Op. 1181), reparation was allowed. Complainant shipped 300 bags of Mexican peas from Guaymas, Mexico, to Philadelphia. As the shipment weighed 66,000 lbs., a 60,000-lb. car was ordered, but instead two cars were furnished and two bills of lading issued; consequently the carrier charged freight on 80,000 lbs. instead of 66,000.

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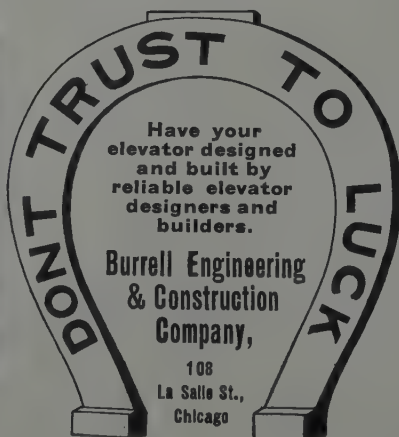
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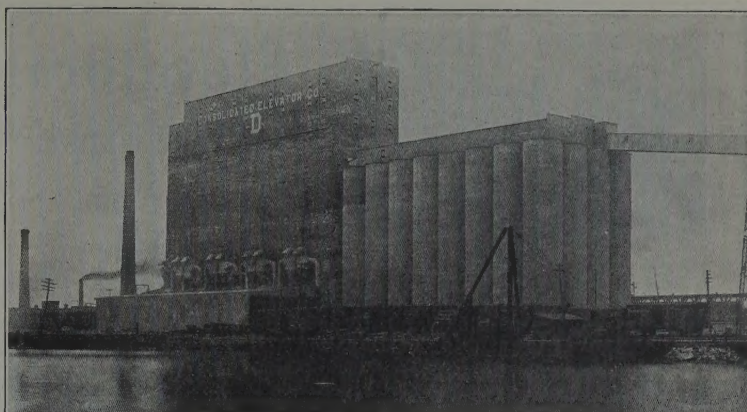


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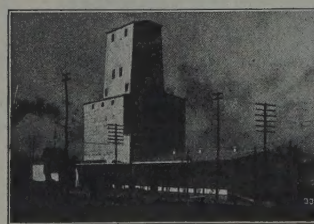
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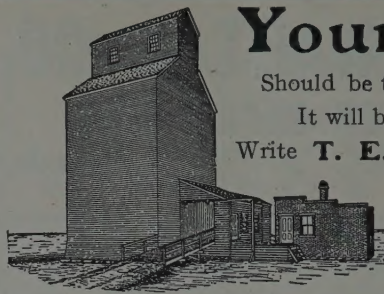
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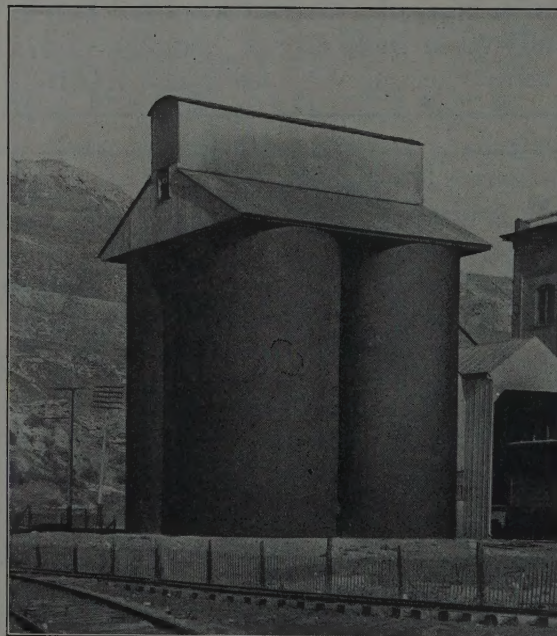
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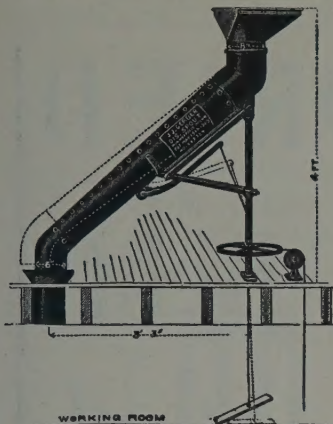


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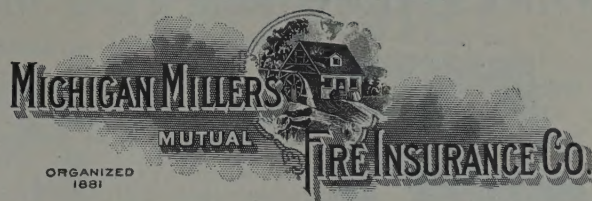
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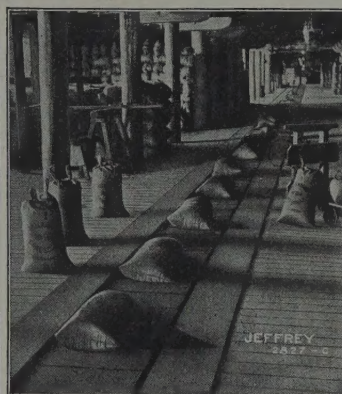
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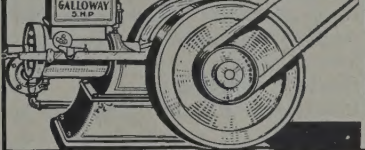
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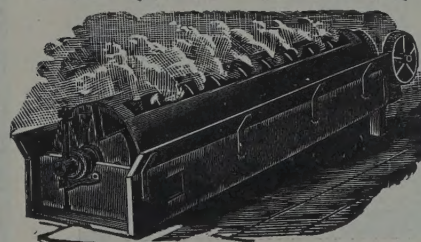


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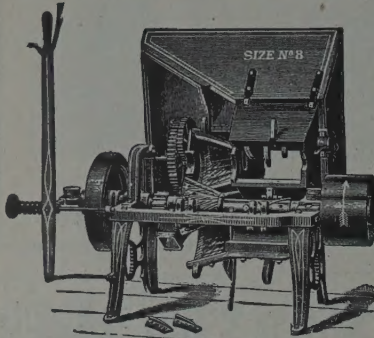
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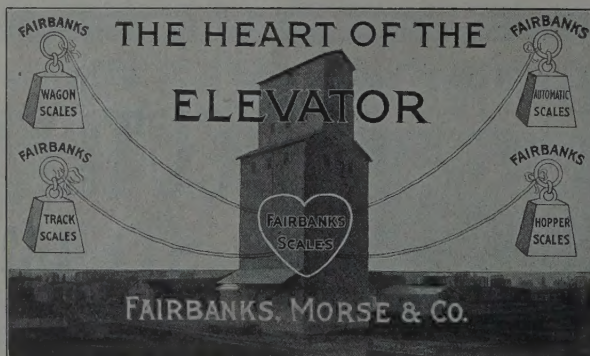
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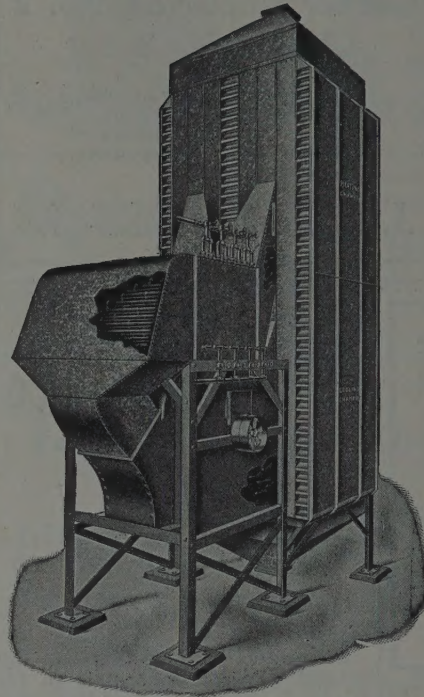
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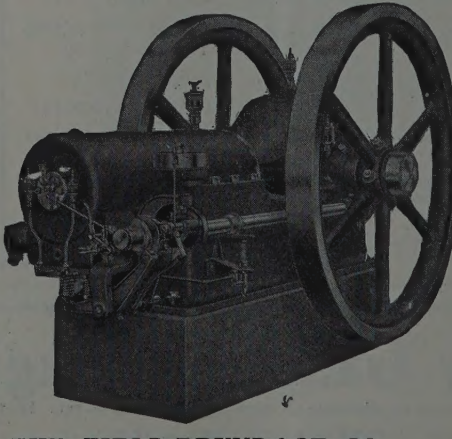
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